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WARREN ISHAM, EDITOR.

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SUPPLEMENT TO THE PRIZE WHEAT ESSAY,

*Designed to illustrate its positions more fully,
and supply its defects, and to be published in
connection with it, in the transactions of the
Society.*

BY THE EDITOR.

The foregoing essay, though long, is entirely too short; in some instances, apparently necessary illustrations are sacrificed to brevity, while some important things are omitted altogether.—Some of the more important of these defects we shall here supply.

In writing it, we endeavored to consult the peculiar circumstances, wants, and necessities of the farmers of the West—and we are free to say, that, to some extent, we have also consulted their weaknesses, their prejudices, and their follies, as the only possible way of approaching them.

We refer more particularly to the strong repugnance of our people to manuring, with here and there a solitary exception, which repugnance is partly right and partly wrong—right, considered in reference to the application of eastern systems to the west—but wrong, totally wrong, wrong in every aspect of it, as opposed to the use of appropriate means for the improvement of the soil.

What is the use in talking to our farmers about guano and bone dust, *et id genus*, with discussions upon which eastern agricultural papers are very properly filled? Go talk to the idle wind—they will not hear you. If you would drive them irrecoverably away, and shut out all hope of improvement, then urge upon them the use of those expensive manures, resorted to at the east—the very term manure, in its most acceptable application, being more offensive to the prejudices of many, than the fumes of the dung heap are to their nostrils. They must have something more accessible, and less expensive, and must be lead

into a system of manuring by easy steps, and almost without knowing it, certainly without feeling it, or they will not be lead at all, and our lands will go down, down, down, until the fair and fertile fields of the west shall become a barren waste.

These are facts open to the observation of all, and in view of them, we deem the system we have recommended, the only practicable one—the only one which is at all accessible to the mass of our farmers, and the only one which they could be induced to adopt, and, at the same time undoubtedly the best they could adopt.

But will this system last always—do you ask? We answer, in the first place, that whether it will or not, it is not designed to supercede the use of other manures. It is recommended, not only as the best and cheapest system of manuring which our farmers can adopt, but in the hope that its beneficial results will operate to abate their repugnance to manuring in other forms, and in every accessible form, and lead them into a general system of husbanding and applying their manures.

This, as matters now stand, is a very unfashionable, low, and ungenteel business, most of our farmers appearing to feel themselves entirely above it. But they will be cured of this, when they come to learn that the application to the soil of their manures will put money in their pockets—that their manure heap is a mine of gold—nay that it will pay a greater interest than gold—and learn it they will.

And what is manure? Suppose you were to enter a dining-room, pinched with hunger, and impatient to satisfy its cravings—as you looked wistfully around upon the loaded tables, would you need any arguments to convince you that the supply of food before you was better suited to your wants, than if there had been only a few crumbs? Well, what those loaded tables would be to you, your manure heap would be to your

crops—if they could only get it. It is their appropriate food, the victuals for which their hungry mouths are ever open; but they cannot go to it—you must carry it to them, and feed it to them, as you feed corn to your hogs, and you will find it a far more profitable business than that.

Some farmers seem to suppose that nothing is manure but the dung heap. That is a deformed idea. Anything is manure that furnishes victuals for your crops, beyond what was already in the soil. But what have we said? We fear we have turned the stomachs of some of you against clovering, now that you have found out that *that* is manuring.

Well, it is a very pretty way of manuring—it will neither soil your pretty fingers, nor disturb your olfactory sensibilities. How clean and nice, and how beautiful to behold is the clover field, clothed in its flowering beauties, and how grateful its perfumes, borne to you upon the passing breeze, as you go whistling along at the plow-tail!

And you need not call it manuring, if it does not suit your taste, nor need you call your dung heap manure—call it crop-feed, and when you give it out to your crops, call it, not manuring, but feeding them. Would not that make it a much prettier business?

But the question recurs—will this system last always, independently of other manures? We answer again, that it has lasted, and lands have been constantly improved under it, as long as it has been tried. Bear in mind, however, that it is not to be confounded with the shallow-plowing system, either with or without clovering.

Again we answer, that, as a general thing, we see no good reason why it should not last, we will not say always, nor will we say how long.—True, indeed, the deeper the plowing, the more the mineral elements of the subsoil are drawn upon by reason of increased crops; but it is to be considered, that the available supply of these elements is proportionably increased by reason of the free admission of air and heat among them, to facilitate their decomposition, and that thus there is an increased supply, in a state of solution, to meet the increased demand. And when it is further considered, that the subsoil is made up almost entirely of mineral elements, (although a portion of them are insoluble,) and further still, that when the subsoil is sufficiently loosened, plants draw nutriment from a depth of at least four feet in the earth, it may well be supposed that all the soluble elements contained in that depth of earth, would be a long time in being dissolved and used up for the food of crops. And another consideration still—in proportion as they are used up, so as to diminish the thickness of the four feet of earth from which they are drawn, is another layer of subsoil still below it, added to it—if such a diminution is to be supposed.

Do you ask what evidence we have that plants

draw nutriment from that depth? In reply we would say, that the roots of some plants, as the clover plant, and some others, penetrate to that depth, under favorable circumstances. But if the roots of plants do not ordinarily reach half that distance, the mineral elements which lie there, will be brought up to them in solution in the water which ascends by capillary attraction, and ascends more or less freely, according as the earthy medium through which it passes, is loose and porous, or compact and solid. This is the reason why loose, sandy soils stand a drouth so well, and why stiff clay soils are the first to suffer from drouth. It is on the same principle, that a sponge becomes saturated with water upon bringing its under edge in contact with that fluid, the water ascending through all its pores. This is called capillary attraction, and it is a well ascertained fact, that its influence extends at least four feet into the earth. And thus deep and subsoil plowing increase the supply of mineral elements, not only by hastening their decomposition, but by facilitating their ascent from below, by attraction, as well as by means of the clover root.

We admit, of course, that even under these circumstances, a long course of cropping with wheat, no oftener than once in three years, may so reduce the phosphoric acid, lime, potash, &c., as to affect the crop. And in view of the liability to such a contingency, as free a use as possible of manures containing these elements, should be made; and indeed, as we have said, no means either of restoring the elements drawn from the soil, or of adding to them, can be safely neglected.

And one word here in regard to clovering.—Whether it is the better way to turn under the crop, or to feed it down, and give the land the benefit of the manure which is dropped in consequence, there is a difference of opinion, altho' most farmers who have tried both ways, give the preference to the former. And we think the argument preponderates in its favor. It is a fact, of which any one who takes the pains, may satisfy himself, that the roots of the clover plant grow much larger when the top is suffered to attain to its full growth, than when kept pastured down, and it is from the decomposition of the root that much of the benefit to the soil results.

Again, less than one-half of the substance of the clover consumed by the animal, is voided in the excrements, while the other portion, (from 55 to 60 per cent,) most of it, goes off into the atmosphere in the breath of the animal, as the result of chemical changes which are carried on to keep up animal heat, and a portion of it is of course appropriated to repairing and building up the system. These things being so, it would seem to be manifest that the greatest benefit must result from turning under the crop.

The idea that a grass crop of any kind becomes better fitted for the food of plants by having been consumed by the animal and voided as excre-

ments, is entirely erroneous. No possible thing can be added to it by such a process, while much that is valuable is taken away. In a state of decomposition, the same elements appear in both cases, except that in the excrements, some of the elements are found in far less proportion than in case of decomposition by natural decay, which makes them, of course, less valuable for manure, than the entire crop in a state of decay. True, in this process of decay there is, to some extent, an escape into the atmosphere of the same elements, though to nothing like the same extent.—These have ever been our views, and we are gratified to find them most ably sustained in an article published in the Transactions of the Scientific and Agricultural School, Kennington, London, by Sir John Oakley. How groundless, then, is the idea, that the clover crop turned under, can, under any circumstances, sour the land, any more than the stable manure made from it would!

This being so, we arrive at the conclusion, that turning under a green crop is a speedier way to manure land, than to feed it out in hay, and return the excrements, that is, the excrements from the hay that came from the land, and no more, and this is in accordance with observed fact.

But the excrements returned will enrich a meadow, and make the next crop superior to the preceding, and that too, when a portion of them, (more than half their weight,) have been left behind, and when the roots are still alive, and require feeding instead of yielding nutriment by decomposition. How much more, then, should the land be enriched when the entire crop, in a state of decomposition, is given to it—not only the entire top, but the root also, the decomposition of which, some think, adds as much to the soil as that of the top!

In reference to the propriety of seeding to timothy, or timothy and clover together, instead of clover, we would say, that we do not esteem it profitable. Not that we suppose the common objection against it, that it chokes out the wheat crop, to be incapable of remedy. Deep plowing will, in most cases, obviate that difficulty. We have met with a number of farmers, who testify from their own experience, that they have found that turning timothy sod under deep, is an effectual cure for the evil.

But timothy does not possess the same power, as the clover plant does, of drawing nutriment from the atmosphere; it does not exert the same mechanical effect upon the soil, to make it loose and friable; it does not penetrate to the same depth, by far, to bring up the mineral elements of the subsoil; nor does it, by its decomposition, either of its top or its roots, give to the soil anything like the same amount of elements essential to the perfection of the wheat crop.

Upon most of our Michigan soils, if timothy and clover be mixed, in three or four years the former will run out the latter, leaving a tight-

bound timothy sod to be turned under. A good crop of wheat, however, may be raised upon timothy sod, if plowed in season to decompose, and plowed deep, but not so good as upon clover sod.

In regard to once plowing for wheat, a word more needs to be said. Here comes a man in whose soil clay predominates, and underneath which lies a pretty stiff clay subsoil, and he opens his mouth and says, "You need not talk to me about once plowing for wheat; I tell you it won't do; my soil cannot be pulverized by once plowing." And no wonder—a dozen plowings would not pulverize it; but go and drain your land thoroughly, sir, and then it will turn from the mould-board "as mellow as an ash heap," the light-colored, hard, clay subsoil having been converted by the operation into a dark-colored, loose, and highly productive soil. Try, and see if it be not so. Be not deceived—it is not necessary that water should stand upon the surface to indicate the necessity of draining. All lands that have a clay subsoil, need it to make them fit for the wheat plant; for how can it be expected to exhibit a healthy growth, standing as it does, for months together, in all such soils, with its feet in cold water? And when that is dried out, the case is no better, for the lower extremities of the plant are now encased in a solid clod, as impervious, well nigh, as a rock!

Do you say, that you fear draining would make your land too dry in a dry time? Idle thought! This is the very evil you are now suffering for lack of draining. All such lands, undrained, are almost always either suffering from an excess of water, or baked almost like a brick-bat. So hard do they become in a drouth, that neither water from below can ascend, nor the atmosphere from above, with its watery vapor, penetrate into the soil. Would you then have your lands neither too wet nor too dry, drain them.

But here comes another, fresh from the harvest fields of his experience, and says, "I can't believe in once plowing for wheat, for I have always found, that when I have summer-fallowed a part of a field, and could not finish it on account of the drouth, so that the other part could be plowed only once, the summer-fallowed portion, which was plowed twice or more, produced much the largest yield."

Aye, indeed, have you found it so? So have we—and so far, our experience, as wheat growers, tallies exactly. But what does this shallow business prove, in reference to the advantages or disadvantages of once plowing to double the depth, and turning under clover? Just nothing at all. Wait then, good sir—wait until you have given the system recommended a trial, before you open your mouth in condemnation.

There is something pertaining to the clover crop, which exerts a powerful agency in loosening and pulverizing the soil, inasmuch that once plowing leaves it in as good a state as twice plowing of a naked fallow. This effect is doubtless, in

part, to be attributed to the ground being shaded with the crop, having the effect, as friend Starkweather, of Ypsilanti, remarked to us, of mulching, and in part to the mechanical effect of the roots upon the soil.

Clover once turned under, should not be again disturbed, lest the fermenting and decomposing process should be arrested, to say nothing of the dissipating effect upon the elements already in the soil. But the surface should be stirred by the cultivator, which is far better.

In regard to the best time for the plowing, if the object be to add the greatest possible fertility to the soil, and get the greatest possible wheat crop, independently of other considerations, then the best time would doubtless be the fore part of July, or about the time the first crop is in bloom. In that case, the ground should be gone over with the cultivator two or three times before seeding. But if your object is to get the greatest possible profit from your ground for the time being, at the same time that it is moderately improving, you can pasture your clover moderately until August, or even remove the first crop for hay, and turn under the second. Incredible as it may seem, that land should be thus kept improving, facts show that the contribution made to it by the roots, makes up for the loss. In this case, the plowing should be done in August, at least three or four weeks before seeding, so as to give the clover time to commence fermenting and decomposing, that the germinating wheat plant may be quickened by the genial warmth which is evolved in the process, and reap the benefit of the gases which escape. Some say the crop will be two weeks earlier for it, as well as more vigorous. In this case, the cultivator should be passed over it once or twice, preparatory to seeding—better twice than once. Thus pulverizing the surface will open it to the freer admission of air, with its watery vapor and its fertilizing elements, and also of heat.

We are still unable, from any new light we have received, to give a decided preference to any one variety of wheat, over all others. Of the old standard varieties, the small white flint seems to be in most general favor, as being hardier and safer than most other kinds. But those who still entertain the belief (which was formerly general,) that this variety is not liable to be injured by the insect, will find themselves most woefully mistaken, in the event of a trial. We have uniformly found, and the testimony of others agrees with our own, that when this subtle enemy makes a general sweep of the wheat crop, it pays no special respect to this variety. And it will not do to sow it on low ground, or on any ground in which there is an excess of vegetable mould, and of course, a deficiency of silica, or sand, for it cannot stand up at all on such a soil. It inclines to fall to the ground upon our best wheat lands, when left standing until it is fully ripe, but upon such a soil as that above described, it is of little use to

try to raise it, there not being silica enough in it to form, in chemical combination with potash, the glaze necessary to stiffen the straw. All who have tried this variety upon such land, know this. Still, upon good wheat lands, it is, perhaps, all things considered, as profitable a variety as any other. It will neither shell nor grow by standing.

Of the other well known varieties, those most in favor are the Souls', the Hutchinson, or Crate, and the blue stem. The great objection to the Hutchinson, or Crate variety, is its liability to waste by shelling, and to grow—otherwise it seems to be esteemed as superior to almost any other, it being a great yielder, and sufficiently hardy for this climate. But if the position we have taken in regard to the advantage of harvesting wheat before it is fully ripe, be correct, (and that it is there can be no doubt,) this objection will be obviated. The blue stem seems to be in general good repute. The Souls' is the variety which Mr. Linus Cone has been so successful in raising, of late, but others have tried it with unfavorable results. There seems to be some doubt whether it is sufficiently hardy for this climate.—Many, however, esteem it one of the best varieties. Of the Italian, or Dougherty wheat, a new variety, which has been so highly spoken of by many of the farmers of Berrien county, we know nothing beyond what they have said. The Mediterranean is a hardy variety, and is more secure against the insect than any other, and, on the whole, the surest of all the varieties: but it is in bad odor with the millers, and they have well nigh excluded it from the market, some say wrongfully, because the grinding of it is unprofitable. How far this is true, or whether it is true at all, we do not know. We know of some millers who say that it makes flour of as good quality, and as much of it, as any wheat.

A great deal has been said about the importance of changing seed with those who have a different soil, as a means of preventing wheat from degenerating, and even improving it; but we think that it is paying too dear for the whistle, the same end being accomplished at a much cheaper rate, by each one's selecting the choicest seed of his own. No man will go to a distance for seed wheat, without getting the very best that can be found in all the region. And if farmers were equally particular in sowing only the best of their own seed, the result would be equally auspicious. This is proved by the fact, that new and improved varieties of wheat have been originated by putting the seed through a process, which separates the plumpest and largest kernels, and sowing them without any change of soil.

We might extend these supplementary remarks much further, and indeed we hardly know when we should arrive at a point where we could stop because there was nothing more to be said.

We have been watching to see if some snarling, invidious creature, would not grow out something by which our very imperfect essay might be

improved, and certainly we would be willing to adopt any suggestion, from friend or foe, which might, by any means, be made subservient to the advancement of the great cause—but we have hitherto watched in vain.

EFFECTS OF THOROUGH FARMING.

For the Michigan Farmer.

Friend Isham:

At the late annual State Fair, I became a subscriber to your valuable paper, and I can truly say, that I have been highly interested and profited by its perusal. Much valuable information is to be derived from the contributions of your numerous correspondents, who, guided by the theoretical teachings of yourself and kindred spirits, are thus enabled to give to the world the practical results of their experiments in agricultural pursuits. To this end, I propose to give my experience in *deep plowing, fall plowing, and once plowing.*

I have, for a long time, been theoretically convinced of the importance and necessity of deep tillage, but never tested its beneficial effects till three years ago last summer, when I came in possession of one of the oldest improved farms in the town—having been under cultivation upwards of twenty years. The soil was naturally strong, being composed of clay, sand, and vegetable mould, all resting on a clay subsoil. As you may well suppose, large crops were at first raised upon this farm, the wheat crop, in some cases, averaging as high as forty bushels per acre. So much had its capacity for raising wheat been reduced by shallow plowing, and improper culture, that for the last few years fifteen bushels per acre was about the average crop. The land had never been plowed deeper than six inches, and a hard pan was formed at that depth, nearly as hard as the beaten road, alike impervious to air, to water, and to the roots of plants. The consequence was, that every heavy rain carried off large portions of the soil from the most elevated portions of the fields, to the lower, where it was not needed; or, what was worse, it was carried off from the farm entirely. I saw the evil, and determined on a remedy.

I purchased one of French's subsoil plows, and commenced operations on a piece of sward land. The plow was gauged to the depth of twelve inches, three heavy teams hitched on, and off we started. Everything worked admirably; the forward share turned four inches of the sod, and the hind one raised eight inches of the subsoil, completely covering the sod to that depth, leaving the plowed land as even and level as though it had been rolled, and as mellow as a garden.

This subsoil plow was a novel thing in the neighborhood, being the first one introduced, and the only one now in use in the town; curiosity was on the tip-toe to witness its performance, and many neighbors came to see how "the thing

worked." They were delighted with its execution, but expressed their doubts as to the propriety of bringing up so much of the "barren soil," as they termed it. Some of them even went so far as to assert that they had known many farms at the east entirely ruined by deep plowing! and confidently predicted the same results for mine. I overheard one of them say, while passing by the field where I was at work, that he "would not have the d——d thing on his farm, any way!"

But I kept on, regardless of their predictions, until I had turned over six acres, which, after being properly prepared, was planted to corn.—Owing to a very dry spell immediately after planting, the corn came up very unevenly, and much of what did come up was destroyed by the wire-worm, so that the crop was not as stout as it otherwise would have been, but was still a very good one, and obtained without much labor, as there was scarcely a spear of grass or a weed to be seen on the whole field.

I next commenced summer-fallowing for wheat a field of eighteen acres, from which a crop of wheat had been taken the previous year, and from which some ten crops of wheat had been taken in 23 years. The field was completely covered with a thick mat of white clover, which was turned under to the depth of twelve inches. No sooner was the plowing finished, than commenced those heavy rains for which that summer, '48, was noted; and here I found I had gained in at least two points, by this "villanous practice" of deep plowing:

First, I found that the rain, instead of running in little brooks from the surface of the field, as before, carrying away the best portions of the soil, now readily soaked into the ground, thereby fertilizing the soil by imparting its ammonia.

Secondly, I observed that, while fallows plowed in the ordinary way were completely overgrown with grass and weeds, not a particle of vegetation was to be seen on mine.

Owing to the continued wet weather, it was very late before I finished seeding, as late I think, as the first of October; consequently but little hopes were entertained of a heavy crop.—The next season, as we may all well remember, the wheat crop was almost entirely cut off, in the timbered land, by the rust, and of course mine suffered with the rest; but a heavier growth of straw I never saw. Indeed, had the season been as favorable as the present, judging from the growth of straw, there must have been at least forty bushels to the acre; as it was, the yield was only about half that amount.

Perhaps your readers will say that I have not gained much yet, by deep plowing, but let us see: In the summer of '49, I summer-fallowed the piece upon which my first experiments in subsoiling were made, and upon which a crop of corn was raised the previous year. It was plowed as deep as could well be with a common plow,

just deep enough to turn up some of the remains of the old turf, which I found completely rotted, and of a dark brown color.

And here let me remark, that there is a manifest difference between a sod's rotting and dying. Many farmers are in the habit of breaking up their sward land to the depth of only four or five inches, so that the sod may die, as they say; and I have frequently seen the harrow clogged with these dead sods, as large and tough as sheep skins, even as late as seeding time. I prefer to have the sod buried so deep that it will not only die, but rot.

But to the summer-fallow again: In about two weeks after the plowing, the cultivator was put on, and a thorough cultivating given to it, which operation was repeated every dry spell, so as to give the land the benefit of the frequent showers and heavy dews. The latter part of August, the whole field, or rather the two fields, was thrown into lands, or beds, seven paces wide, excepting one land which was not plowed the second time, in order to test the relative advantages of once plowing and twice plowing. Before sowing, I purchased a quantity of refuse salt, and sowed it, broadcast, on the land, at the rate of 2 bushels to the acre, skipping one land and sowing a double portion on another, applying it also very freely to a spot of 4 rods square, of very rich, mucky land, where the wire-worm lived in great abundance, and where the rust had invariably injured the preceding crops of wheat. I also purchased a load of shell lime, and applied this at the rate of 4 bushels to the acre, omitting one land and doubling the portion, as above, applying it also freely to the rich spots.

On the 5th of September, the whole was sown with three varieties of wheat, viz: 8 bushels of white flint, three of blue straw, and 1 of the white Souls', at the rate of 2 bushels to the acre, all cultivated in, and the pieces rolled down smoothly. It soon came up very evenly, and grew rapidly.—had a dark green color, excepting the land that was not plowed the second time.—Upon this land there was a marked difference in the appearance of the wheat, from the time it came up till it was harvested, yielding less than the adjacent lands that had been plowed twice.—This, however, is not to be regarded as testimony that more than once plowing is necessary or profitable, for wheat, as I shall endeavor to show in my next.

In harvesting my wheat, I found that where the most salt and lime had been sown, the wheat was the plumpest, the straw brightest and stiffest, and the wire-worm had entirely disappeared.—Upon threshing my wheat, I found an average yield of 33½ bushels to the acre, weighing from 62 to 64 lbs. to the bushel. On one of the fields, containing 1½ acres, there were 66 bushels of wheat; 26 bushels of this was raised from the bushel of Souls' wheat, sown on 97 square rods

of ground. The Souls' and flint weighed 62 lbs. to the bushel, the blue straw, 64 lbs.

Now, Mr. Editor, I think the above increased quantity of wheat per acre over former years, is mainly owing to deep tillage, aided, perhaps by the application of salt, lime, and a favorable season.

But I find I have spun this paper out to such a length that I shall be obliged to defer the consideration of the other two subjects, for the present. Meantime, should you consider this of sufficient importance for insertion in your paper, you may hear from me again.

Yours truly, J. S. T.

Plymouth, 20th Jan. '51.

REMARK: Had friend S's wheat field been thoroughly drained, his crop would probably not only have been partially, but wholly secured from the ravages of rust. With such a subsoil as he describes, and a wet season, the downward roots could not avail themselves of the mineral elements below, the subsoil being saturated with water. And if the mineral elements turned up, partially saved the crop, (as we doubt not they did,) doubtless the full supply which the subsoil would, in that case, have yielded, would have entirely saved it. Our friend Cone remarked to us recently, that upon a certain low place that ran through one of his wheat fields, with a subsoil similar to that of Mr. T., his wheat always rusted till he drained it thoroughly, since which there has been no appearance of rust upon it.—Ed.

LETTER FROM A WHEAT-GROWER— STRIKING EFFECTS OF DEEP PLOWING.

For the Michigan Farmer.

Mr. Editor:

Dear Sir: I enclose you the names of five subscribers for your truly valuable paper, and four dollars.

As you seem desirous to obtain the results of actual experiments in raising crops, I venture to give mine, in raising a crop of wheat upon a field containing 35 acres, which had been cropped without intermission for fifteen years previously, without the use of fertilizers, except some portion of the straw produced, during the time. As might be expected, the sorrel had full possession of the soil. I procured a No. 3 subsoil plow, and two strong pair of oxen, to break up the fallow, letting the plow run from nine to twelve inches deep, which turned up about four inches of new soil.

This I thought was the stuff for producing wheat. I designed to use the cultivator during the summer in dry weather, to keep down the sorrel, should it make its appearance—but wheat harvest came on quite early, and after that was

over with, the ground was too wet for some time; however, I resolved to try the cultivator on part of the field, (by way of experiment,) and cross-plow the rest. The cultivator left the sorrel lying on the top of the ground, where the sun killed it completely in a day or two.

On this portion of the field, at seeding time, the wheat was sown and covered with the cultivator—upon the remainder, the harrow was used for covering the seed; the quantity of seed was equal, being $1\frac{1}{2}$ bushels to the acre. There was no perceptible difference in the wheat at harvest time, put in as before mentioned, excepting 10 acres upon one side of the field, which received thirty pounds of plaster to the acre, the spring previous; upon that portion there was decidedly the best wheat. The product of the field was 805 bushels, being an average of 23 bushels to the acre.

Adjoining this, was a field of like soil and condition, which was plowed twice with a single team, at the same time as mine, which averaged only 12 bushels to the acre.

Yours respectfully,

GEO. W. KENNEDY.*

P.S. The subsoil plow mentioned above, was Smith's Michigan—made at Jackson; price \$13. Hanover, Feb. 24, '51.

* But how came you to know, friend K., that there was such a paper as the Mich. Farmer?—Not a copy of it, to our knowledge, was previously taken in the town. We trust, however, that you have opened the way for scores of them; and what is better, you have fairly entered the lists as a correspondent, and we hope and trust that your very interesting communication will be the forerunner of many others.

We conclude that you did not turn under clover, in the case mentioned above. If you had, the wheat on the once plowed portion would probably have been the best, unless the cross plowing had been shallow.—Ed.

For the Michigan Farmer.

WORMS IN THE LUNGS OF SHEEP—A REMEDY.

Mr. Isham:

In the year 1847, my sheep numbered 154. About the first of September, they commenced wasting away gradually, until they were unable to rise, and would finally die. Their feed was clover and other grasses, and a plenty of it. They continued to die until the next spring, fifty or more having died before foddering commenced.

They died in all to the number of 112 out of 154. I was ignorant of the cause until the middle of winter, when I dissected 15 of them. I found in the head of some a few grubs, but not

to any extent. In the lungs, I found all the air passages completely filled with a white worm, resembling white cotton thread, cut up from 2 to 6 inches in length. I have searched all the works upon the diseases of sheep within my reach, without finding an instance of the kind.

The next season, immediately after shearing, I commenced tarring the troughs once a week, before I put in the salt, until frost came, since which time my sheep have been perfectly healthy, and now number about 300.

Although some time delayed, I make this communication for the benefit of sheep owners.

Yours, &c.,

W. A. BUCKLAND.*

Howell, Livingston Co., Mich.

* Please let us hear from you often. The accompanying article is necessarily deferred.—Ed.

For the Michigan Farmer.

WHEAT CULTURE—ONCE PLOWING.

TECUMSEH, Feb. 24, 1851.

Mr. Editor:

Being an advocate of once plowing summer fallow for wheat, I give to the inquirer my views as to the time of plowing, and the manner of cultivation between plowing and sowing:

In the first place, I will give my views as to the condition of the field. A field that has been well seeded with clover and timothy, and has lain one summer to pasture or meadow, having received a sprinkling of plaster early in the spring, to give it a larger growth of top and root, and that has not been pastured after the 15th of Nov., in which case the clover will better stand the coming winter and spring, the roots being even with the surface and the tops not being exposed to the late frosts and drying winds, is prepared to give an early and an abundant growth in the spring, which will enable the farmer to commence plowing much earlier, and have twice the amount of clover to turn under, that he would, had he allowed his cattle and sheep, and those of his neighbors, to have fed upon it and run over it from the 15th of November, during the winter and spring months.

The plowing, I think, should not be commenced until the clover is in full bloom, and if the plowing can all be done in a few days, it would be better to defer it until the heads begin to ripen; a plow should be used that will lap the furrows so far as to prevent it from falling down and forming an immediate smooth surface, especially in a clayey soil.

The use of the harrow, immediately after the plowing is done, is advisable, to prevent vegetation, to cover the clover that may not have been turned under by the plow, and close the surface of the land, which will cause immediate decomposition of the clover, or a commencement of it. A double harrow, of thirty teeth, should be used,

instead of those too much in use, with from nine to seventeen teeth.

The next implement to be used, is the cultivator, except the land be uneven, or lumpy, in which case the roller is to be used, previous to the cultivator. The field should be gone over, in most cases, with the cultivator, twice before sowing the seed—the last time at least two weeks before sowing the wheat. The cultivator should be a double one, (no joint,) with fifteen teeth, arranged so as to cut only six feet wide, to be drawn with three good horses or two yoke of oxen. The cultivators in use, aside from the wheel cultivator, with from 7 to 9 teeth, are but little better than the old fashioned harrow. The cultivator should be used the first time going over the land, after having sown the seed.

One idea farther is, that having prepared a field in this way, for a wheat crop, I would recommend, as soon as practicable after harvesting the wheat, to plow the field the usual depth, or a trifle deeper than before, and if well done, the chance for a good crop is better than that of one half the fallows, especially those composed of naked stubble, of wheat, oats, barley, &c., saving once seeding to clover, a great amount of labor, and getting a crop one year sooner.

The reason of sowing on the stubble, a field of the same size may be used for meadow, instead of being idle as a fallow. Try it.

J. V. DUPUY.

For the Michigan Farmer.

MARSAALL, Jan. 20th, '51.

Mr. Isham:

I wish to ask you, or your correspondents, if a cross of the Cotswold sheep and fine woolled sheep, would be a benefit or a damage?*

S. H. M.

* Let some one who knows, answer.—Ed.

For the Michigan Farmer.

TRENTON, 1st March, '51.

Friend Isham:

Having just noticed the query of your correspondent J. C., in regard to the kind of corn best to sow, and also the quantity of seed per acre, and having had some experience in the matter, I would say to him, and all others that wish for a sweet, wholesome fodder, and a profitable one for milch cows, to take of eight-rowed flint, and sow one and a half bushels to the acre, on a rich soil, and by the blessing of God he will surely harvest a heavy crop of the best fodder found in the country.

To your correspondent J. C. Allen, in regard to fence posts, having been somewhat acquainted with the various kinds of oak, I would say, that I prefer the white oak to any that I am acquainted with; and be sure, friend Allen, not to be at the expense of setting red elm, as it will not pay. As

to sassafras, I am not acquainted with it for posts, but for pumps in wells, it stands well.

Now, friend Isham, I must ask you, or some of your readers, to give me the proper remedy for a swollen udder in cows, as I have had some trouble for the last year in that line.

Yours, &c.,

YANKEE.

NOTES OF A TRAVELER IN FRANCE.

The following extracts from a letter of L. D. Norris, Esq., now traveling in Europe, to his friends in Ypsilanti, have been kindly furnished, at our request, for the Mich. Farmer. We doubt not our readers will be much interested in them, as we have been:

For the Michigan Farmer.

BALLENZ, France, Jan. 23d, '51.

* * * The most difficult task I have here, in these out-of-the-way towns, where English never come, and where our arrival creates as much noise and confusion as the appearance of a caravan of wild beasts, is to convince them that we are Americans—as they think all Americans are black; and the more traveled recollect America as a country that has a constitution copied after the French Republic of '48!

All freighting is here done over good Macadamized roads, in carts, with five, six, and nine horses, and collars with bells, which must weigh forty or fifty pounds.

They very rarely use the plow, and when they do, it has a crooked wooden beam; but in place of the plow, they use the spade, one going over the ground with that implement, and another following, working the soil some eighteen inches.

In the vine-growing districts, along the Rhone, the heat of the rocks being necessary to ripen the grape, the sides of the rock are terraced, and in some places, the vine is planted in baskets, and those placed in the crevices of the rocks, as the only way they can confine the soil. The manure for the vines is carried up the mountains by women, who here do all the hard work—pruning, plowing, spading, digging, &c. Before every door of the village huts is a compost heap, upon which is thrown manure, leaves, straw, and kept moist—manure being preserved and kept with as much care as gold.

Every half mile, you will meet with a little old woman, with a little old donkey, and two huge panniers, with a small steel scoop in her hand, collecting manure along the highway. Very often there are two, fighting for the same pile!

No cattle, hogs, or sheep, are allowed at large, and there are nothing like what is known with us as fences; occasionally you see a hedge, oftener dykes, the banks of which are planted with willows, which are kept about five feet high, looking like a huge mushroom, the top being pruned every year for firewood, which is very scarce and very dear. In Marseilles I paid two francs, (forty

cents,) for about six small sticks and a bundle of grape-vine cuttings for kindling. * * *

The mountainous regions are mostly wine countries. The annual product of France is about 700,000,000 gallons. The poorer and gravelly vallies grow the mulberry for the silk worm; the richer, grains and choice vegetables. South, in the vicinity of Marseilles, you pass miles of olive and almond orchards, which, with their deep green on the margin of the blue Mediterranean, add great beauty to the landscape, as well as cash to the pockets of the proprietors.

The operation of the government is best explained by a remark made to me by an intelligent Abbe, who spoke good English, that "In our country, we do what is not prohibited. But in France they can only do what is permitted."—The whole country is in an exceedingly unsettled state—"chaos come again"—and unless the present differences between the President and Assembly are soon reconciled, a revolution may be expected. From what I can ascertain of the sentiments of the people, they are ripe for almost anything, provided it only furnish change and excitement.

L. D. NORRIS.

THE RIGHT SPIRIT IN A P. M.

For the Michigan Farmer.

PINE CREEK, (Athens,) }
Calhoun Co., Mich., March 3d, '51. }

Mr. Isham:

Having had a post office established at my house, I feel called upon to do something for my country, it having done so much for me, and think the best way I can accomplish the object is by being instrumental in circulating your valuable paper, which has had but a small circulation in this vicinity, on account of not having the facility, heretofore, to get them without great inconvenience.

I am now getting a club of eight, which will be complete this week.

N.B. I shall not stop with this club, but shall still continue to do what I can to promote your interest in this matter, for by so doing I shall be an instrument in promoting the general welfare—the prosperity of our whole country.

Respect'ly yours,

JAMES WINTERS.

ANOTHER GOOD LETTER FROM GEN. ORR.

For the Michigan Farmer.

LAPORTE, (Ind.) March 8th, '51.

Warren Isham, Esq:

Sir: Permit me to add to the list heretofore sent you, fifteen new subscribers, which, in all, makes 40 that I have sent.—They want to commence with the Jan. number. Enclosed are \$11.25.

The first I sent you were got on the credit of the July number. Since then, the Farmer has

been growing in favor among us. But its reputation for usefulness was not fully established till your wheat essay was received and read. All pronounce the essay "good," while many say it is the best on the subject of which it treats, of any thing they ever read. To all who cultivate, in wheat, a soil like most of Michigan, and northern Indiana, I consider it an invaluable document, and one which ought to be carefully studied by every farmer.

Very respectfully,

J. ORR.

Scarcely had the above been received, when fo! here comes another batch of 32 names, from a new volunteer, Charles Spear, Esq., of the same place, accompanied with the money in advance.

Our Michigan friends will have to look about them, or their Indiana neighbors will outdo them.—Ed.

For the Michigan Farmer.

GREAT NATURAL ADVANTAGES FOR WHEAT-GROWING IN MICHIGAN.

BY A WHEAT GROWER.

Mr. Editor:

Michigan may be emphatically termed a wheat-growing State; its culture has been more extensively pursued than that of any other branch of industry in which we have as yet engaged, and, at the present time, with proper management, may doubtless be considered the most safe and profitable, as well as the most permanent business of the husbandman, and he can always rely with certainty on receiving cash for it; the market for it is not open one day and closed the next, as it is with respect to most other kinds of agricultural products, but every day in the year finds the purchasers all over the State, prepared to pay cash on its delivery, at prices varying, according to the laws of supply and demand in those distant markets for which it may be intended.

We may estimate half the entire proceeds as profits, after paying interest on the capital invested, one-half being sufficient to pay the cost of growing; though this statement may be found to vary slightly in different localities, yet it is considered a correct test when applied to stock companies, such as railroads, manufacturing, banking, steam-boating, and most other kinds of business. When the expenses continue to exceed, in any considerable amount, half of the gross earnings, the value of the stock must fall below par. So with the farmer; when his expenses in growing wheat exceed half of the value of the crops, there must be something deficient in his mode of management, and his system consequently falls below par, and his yields too small for the quantity of lands cultivated. In

this case, the business does not pay, which may be attributed to bad husbandry.

Our location, which combines many advantages over other wheat-growing States, is most admirably adapted to the growth of this staple commodity. In fact, there cannot be found any better, when we consider the great natural advantages of water transportation, which borders us upon three sides; besides we may add the almost innumerable navigable streams that penetrate the interior, at intervals, apparently destined for the express purpose of aiding man in the progress of husbandry, and the train of occupations which follow.

Our soil is naturally rich in the elements which constitute the growth and perfection of wheat; not only the surface soil abounds in fertility, but the subsoil, to the depth of five, ten, and even twenty feet, is ascertained to be equally capable of perfecting the maturity of the cereal grains, on its being exposed to the action of the atmosphere, thus proving the inexhaustible supply of mineral substances which everywhere abounds. These are truths which are within the observation of all.

Our climate is also most highly favorable, being of more uniform temperature than many other localities in the same latitude, probably caused by the extensive bodies of water before alluded to, partly surrounding us. Be the cause what it may, it is sufficient to know that it is invigorating, and highly conducive to the health and happiness of the husbandman, giving him strength to till the soil, sow the seed, and reap the harvest. Nature has been most lavish in her handi-work, in distributing bounties and privileges on this land, and well may we with wonder exclaim, "How beautiful this peninsula!"—how admirably adapted to the wants of man!

With all of these natural advantages to aid him, the Michigan farmer is destined to prosper, especially when he makes up his mind to give the subject of his occupation that careful attention and strict investigation in all its important relations, that it naturally requires; when, by the exercise of his good sense, founded on experience, and supported by natural laws, he is enabled to reject exploded theories, traditional rules, signs and tokens, which hang like an incubus on the mind of those composing our profession; When mind is considered equal to the arm of the strong man, and their united efforts are freely bestowed in the good cause, then will their application lead him prosperously to fortune, increasing in knowledge and in store.

Our success in growing wheat has thus far been as advantageous as could reasonably have been expected, from just tampering, as it were, with a few inches in depth of the surface soil. When the precepts you have endeavored to inculcate through the Farmer, including your valuable essay on the subject before the State Ag. Society, are understood and practiced, then may we

expect results of a character far more favorable to this branch of our profession. We must, however, expect reverses. We cannot always rely with certainty on large yields, though our system of tillage be ever so good; there are doubtless causes over which man has no control, affecting, for good or bad, the culture of wheat.

(To be continued.)

ADVANTAGES OF THE WHEAT DRILL AND WHEEL CULTIVATOR.

For the Michigan Farmer.

Friend Isham:

Having been, for years past, a subscriber for an eastern agricultural paper, in Feb., '50, I subscribed for your most useful Mich. Farmer. I have been much pleased with its contents, and especially with the "Notes by the Way," and should be glad if Mr. I. would make it in his way, at some future time, to visit our rough and homely county, which is, perhaps, not quite so pleasing to the eye as the more western parts, which abound in prairies instead of hills—but a happier set of tillers of the soil can't be found on the prairies, or anywhere else in Michigan.

In the fall of '49, I procured a drill, for the purpose of trying an experiment in drilling.—There was some difficulty attending the distribution of the grain, as it was carried from the box to the teeth in an inclined tube, so that it did not plant the wheat even; but I am willing to give the machine its due. I think the grain stood up better than that sown broad-cast, and it yielded about five bushels more per acre. I have not bought one; will some of those acquainted with the drills in use, recommend one that will sow even, and oblige?

I have, for some time past, used one of the A cultivators, to prepare my fallow. The past season I have been using Ede's wheel cultivator, and it will do more good in going over the land once, than thrice with the A cultivator. In putting in the wheat, I pass but once over the land after sowing. Next harvest will show the result.

This is the first time I ever took up the quill, and I think it ought to be the last.*

A WOLVERINE.

* First rate—try again.—Ed.

LETTER FROM A POSTMASTER.

NORTHAMPTON, Feb. 15, 1851.

W. Isham, Esq:

Dear Sir: Enclosed please find two dollars, for H. Davis and myself, for the present volume of the best agricultural paper in the U S A

Very respectfully yours,

R. P. MARSH.

LANE'S PORTABLE WIND-BREAKER.



For the Michigan Farmer.

Mr. Isham:

The accompanying sketch exhibits the frame-work of one of the most convenient fixtures, for the protection of the brute creation, that I have ever noticed among our farming community. The sample was exhibited to me by Peter Lane, Esq., upon his excellent farm, in this township, (Atlas,) on the Kearsley Creek, a short distance above this village. The frame is constructed as follows:

Two cross-sills, $4\frac{1}{2}$ feet long; size 3 inches by 4

" posts, 5 " " 3 " 4

" girths, 16 " " 2 " 3

Four braces, 2 ft. 9 in. long, 2 " 3

This completes the frame-work, and nothing is wanting to finish the structure, but the enclosing, or "boarding up." This should be done with boards five-eighths of an inch in thickness, and from five to six feet in length, according to the choice or convenience of the builder, which are nailed in an upright position across the girths, edge to edge, so as to form a close, tight wall.

These wind-breakers, when finished, may be conveniently transported from one portion of the farm to another, and set up in any form which circumstances may render most convenient. By removing them from stack to stack, a yard may thus be formed at a very trifling expense, by which means the domestic animals of the farm may be protected from the "pelling of the pitiless storm," and by this means the manure will be left upon the fields, where the earth requires its renovating influence. A great expense will thus annually be saved in the transportation of manure, to say nothing of those peculiar benefits which result from thus avoiding the rotting off of barn sills by the close contiguity of manure heaps—an occurrence so common among the anti-book farming class of our community.

But a still farther saving of expense will result from the diminished amount of food required by the cattle enjoying the fruits of this protection. This is a principle which every intelligent farmer well understands. The most certain way to insure a supply of fodder in the spring of the year, is to protect well your cattle during the winter. Let every farmer provide a convenient supply of Lane's portable wind-breakers, and the farming community will never consent to be without them afterwards. Though our farmers will have less hides to sell in the spring of the year, they will

have more wool for the merchant, and more beef cattle to dispose of to the drover.

I have hastily sketched the above article, at request of Mr. Lane, who desires, through the columns of the Michigan Farmer, to tender the use of his invention to the farming community of this, his adopted State.*

ENOS GOODRICH.

Goodrich, Mich., Feb. 20th, 51.

* Free as air, we suppose, of course.—Ed.

NILES—PROSPECTS AHEAD.

For the Michigan Farmer.

Mr. Isham:

We are on the go-a-head-itiveness line, in Niles. The new bridge across the river, at the foot of Main-street, is nearly finished; the splendid hotel, "Niles Exchange," will be open to travelers in May; the dam will be commenced in a few days, and will be finished as soon as men and money can do it; a plank road from this to Edwardsburgh, is to be commenced forthwith—the plank for five miles are under contract, and the stock nearly all taken. Other roads are in contemplation, and at no distant period will be put in requisition; and, sir, next fall, with our splendid dam finished, our new road in full operation, with the well-known business habits, perseverance, and *public spirit* of her citizens, Niles will show herself up in a light of prosperity, which might well be envied by her sister villages throughout the State.

You are going to Europe. I do not know that I want to send for more than one thing in the stock line—that is a porker. If you see a pair of pigs, not related, with a small head, a turn-up nose, small, lapped ears, short legs, broad shoulders and hips, and a body as long as a rail-cut, bring them along—somebody will pay you for them.

Yours,

L. H. MERRICK.

For the Michigan Farmer.

SALINE, Feb., 1851.

Mr. Editor:

Can you tell us something about the diseases of sheep, and the remedies? We are losing some very nice and fat sheep about here from causes unknown to us.*

Yours &c.

GEO. DELL.

* Please state the symptoms.—Ed.

Mr. Isham: I wish to inquire, by way of the Farmer, whether cistern water is healthy, and can be depended upon with safety, as drink for stock all seasons of the year? I have dug me a cistern sufficiently large to hold five hundred barrels of water. The question has been asked whether that body of rain water would not become impure, and induce disease, as a portion of it would remain in the cistern for a long time.

Yours,

W. S. CRAFTS.

Educational Department.

For the Michigan Farmer.

IMPORTANCE OF THE COMMON SCHOOL.

Mr. Editor:

Having noticed that the "Educational" department of your *indispensable* periodical seems rather to flag of late; I would send a few lines, which can be thrown aside, if more useful matter should be communicated.

There is a great deal written upon the subject of cultivating the ground, and raising grain &c. This is all useful and proper. We cannot subsist without bread. But is it not important also, to devise the best means of providing food for the mind? How small a portion of the duty of the parent is discharged, by merely feeding the body, if the proper aliment of the latter is withheld! Indeed no subject has stronger claims upon us: "for on the correct and early education of youth, depends the ultimate success of every rational enterprise for the intellectual and moral improvement of man." And among all the great and flourishing seminaries and colleges in our land, none are so useful and important as the common school. Most of those who now occupy the highest stations in the community, have commenced their preparation for official rank in society, by drinking at these simple springs of knowledge.

Here all meet upon a common level; and from hence they take their different directions, as they embark upon the busy ocean of life. The influence of our schools is seen in the habits of industry, sobriety and order, which prevail in the community. But however useful our primary schools may be, (and but few can be found that will not acknowledge their importance,) still it is evident that they are not as useful as they might, and ought to be. This seems to be a general complaint. The intelligent farmer calculates with mathematical nicety, the expense of cultivating his fields, and strikes the balance between this and the invoice of his crops with much care; and perhaps it would not be amiss to extend to many of our schools, the same system of investigation as it regards profit and loss, merely in a *pecuniary* point of view.

For example, suppose the school to consist of thirty scholars; The time, board, wear of apparel, and use of books, cannot be reckoned at less than \$1.25 per week. The teacher's wages, board and fuel of the school, at \$5 per week.—The school then costs \$42.50 per week, or \$170 per month. If there are eight such schools in town, the expense is \$1,360 per month. If they are kept three months the whole expense to the township is \$4000. Now if but half the improvement is made that might be made, we cannot estimate the actual loss at less than half

that sum, namely \$2040. In ten years, at this rate, it would amount to \$20,400, besides interest in the meantime.

But in addition to this, there is a much *greater* loss, which cannot be estimated by dollars, and which can never be regained. The time is passing; these scholars are approaching to manhood; their minds are not being stored with that knowledge which is necessary to render them happy, or useful in society. They are soon called to step upon the busy stage of life, unqualified to discharge its duties, as citizens of an enlightened public.

If the above remarks are not *universally* true; still, they are so to such an extent that no apology is necessary for making them. I am aware that there are many schools which are fully answering the design of their patrons; and if the above remarks should cause an enquiry into the causes of failure in other cases; the object of the writer will be accomplished.

Some of the causes of hindrance to the usefulness of schools, might here be given, but as I have perhaps already trespassed upon your patience, I forbear, hoping some other pen may point them out, that a seasonable remedy may be applied.*

Yours Respectfully, R. KENT.

Adrian. Feb. 1851.

* We hope and trust you will prosecute the subject in our absence, for it seems to be one upon which you are very much at home, and certainly none more important can occupy the attention of mortal man.—Ed.

For the Michigan Farmer.

SCHOOL TEACHERS—THEIR REWARD.

Mr. Isham:

To look around on a happy community, made happier by the influence of the good and wise, who employ their time and talents in adding to the happiness, and increasing the knowledge of others, must needs awaken a thrill of pleasure in the hearts of the truly noble.—But to look back to a time when their intellects received their first impulse from your own hand, and to think, that but for days of unwearied effort, and unremitting assiduity, these very men would have been weak and hopeless, perhaps low and degraded, is a *priceless* reward, which none, but the many devoted to teaching and doing good, can obtain. It is of more worth than all the mines of California. It is exhaustless, for the sunshine which it casts about the heart *now*, is but the *shadow* of the treasure which is laid up in heaven.

Many of our schools are taught by teachers who have enjoyed at least *some* reputation, but are not of the first order, and who are contented merely to pursue the usual routine, measuring

their duty, by what is expected of them, rather than by what is in their power to perform. Such *may* not suffer the up-braidings of conscience for not doing more, but their *salary* is their only reward. It is all they deserve. But how different and well merited the reward of him, who at the close of a long school term can, with a clear conscience, say, "I have done my duty, I have succeeded in doing you *all* the good I intended, I feel that my employers will be well satisfied."

Full well do I know the many difficulties and petty trials that teachers of our common schools are doomed to suffer, and let all, who would have those trials lightened, and who wish to *succeed* and to *excel* in their noble calling, endeavor to fill well their place. A child's nature is a deep, *deep* study, and he who but partially understands it, and cannot respect children, and sympathise with them, even in what to us appear their follies, can never gain the key to their hearts to do them good. He who enters a school without these qualifications, or without an effort to attain them, had better *by far* seek some other employment. Above all other, does the *teacher* need a *clean* heart and an *active* hand, but if that heart be cold, or if but one finger of that hand prefer self-service, let its owner stand aside, for he is all unfitted for the holy work.

Hoping these lines will give new energy to *all* school teachers, I will close by wishing them success in every good and virtuous enterprise.*

A TEACHER.

West Bloomfield, March 1st, 1851.

* We should like to hear from "A. Teacher" again.—Ed.

☞ To 'A Farmer's Daughter' we would say, that from all we can learn, the Normal School will not go into operation the present season.

For the Michigan Farmer.

FAREWELL.

Farewell, my bright, green woods; farewell,
Farewell, ye rural fields,
Farewell, each loved, and lovely dell;
With every flower it yields.

Ye broad and sweeping plains, farewell;

Farewell, your vernal dress—

I will not: for I cannot tell

The feelings I suppress.

Upon your bright and blooming breast

A mother's grave, I see,

I love you, in your beauty dressed,

For her, so dear to me.

Farewell, ye much loved friends, farewell,

Perhaps we meet no more;

For there is none of us can tell

Our fate laid up in store.

CANNONBURGH, Kent Co., Feb. 5.

Ladies' Department.

For the Michigan Farmer.

WOMAN'S SPHERE.

FLORENCE, Mich. March 10, 1851.

Mr. Editor:

Again have I troubled you, dear reader, with a few penned thoughts. Although you may say that the space might be occupied with the productions of an abler pen, yet duty calls me to action. While perusing the present number of the Farmer, I noticed an article which seems to be particularly directed to me. I feel truly gratified for the *condescension* on the part of my friend Valeria, but should have felt still more so, if she had specified her place of residence, a communication which she has for some reason withheld.* I would say to Valeria, that though she does not agree with me respecting woman's rights and privileges, I have no regrets in particular to offer, for if all should agree, there would be but little chance for argument, consequently there would be no need of writing. I would also say to Y. that she has certainly mistaken my character, if she concludes from my article of Feb. that I do not love and wish to enjoy our National Liberty—that liberty for which our fathers left their mother country and all the scenes of their early days—that liberty which was purchased by their blood.

Liberty! why, I love the very sound, but I can enjoy it without deviating from that sphere in which woman was designed to move, and I would repeat what has been repeated, that I would scorn the idea of seeking for a participation in those honors which are won by the untiring efforts of wild ambition. I would ask Valeria, if woman cannot fill the station of wife, mother, or sister, with all their respective requirements, *without being in bondage*? Cannot she enjoy life, love and liberty, without equipping herself for battle, leaving her fireside, and those who are dependant on her for that care which they could obtain from no other source? I consider it absurdly wrong for woman to seek for any situation which will unfit her for the performance of those duties which are devolved upon her. Nature requires of her duties which she alone can perform, and if these are duly fulfilled, there will be hardly time for the fulfillment of those public duties which are to enroll her name with those illustrious characters whose fame fills the historian's page, and the records of which will ever live fresh in the minds of succeeding generations.

Valeria says, "when these duties have ceased to become duties;" I would ask her if this is at present the case. I know of no invading foe at present to contend with, which would render it necessary for woman to leave her home and friends, go forth clad in the armor of the brave

* Dexter is the place.—Ed.

soldier. 'Tis true, that there is an invading foe, who goes round like a roaring lion, seeking whom he may devour, and against whom duty calls all, of both sexes, to action; but we need not leave our beloved homes to contend with this formidable enemy. We can always be equipped for the battle, without leaving any of our other duties undone. Let us be up and doing, while the day lasts. As to those who are disposed to trifle with the feelings of my sex, to ridicule or deride their judgments, I consider such as beneath my notice. And all that I could say to, for, or against them, would not amount to the waste of time, pen, ink, and paper. There is no *gentleman* that will do so, and as for the loafer part of community, they are nothing but blanks any how.

One word more to Valeria; I glory in your love of liberty, and your love of country, altho' I may differ with you in opinion. And I cannot but believe, that if my life were required as a sacrifice for my country, it would be as freely offered as your own. And I would remark further, that when you become a candidate for office, I will so far deviate from my notions of justice, as to step boldly forward to the ballot box, and throw in my vote. Let us hear from you again; give us your views upon the subject that elicits such a diversity of opinion.

For the Michigan Farmer.

THE FARMER'S WIFE

If there is aught of bliss on earth,
'Tis found beside the farmer's hearth;
In the calm, serene, and peaceful life,
Of her, who is the farmer's wife.

Then pretty maid, come list to me,
If you would peace and comfort see;
Forsake the city, and its strife,
Become a thriving farmer's wife.

Who is that with an open brow,
Divested of all gaudy show,
Whose step is light, and full of life?
I answer, 'tis the farmer's wife.

So pleasant glides, each rolling year,
That when the harvest moon draws near,
Her every thought, with joy is rife,
So happy seems the farmer's wife.

She makes her butter, fresh and sweet,
Bakes her bread, boils her meat;
All this and more, her hands prepare,
And strives to lighten every care.

A kindly word to all she meets,
With pleasant smiles, her husband greets;
Her happy home all do admire,
Where lurks no vice, no vain desire.

With words of love, and pleasant smile,
She doth the lonely hours beguile;
For to the wife, the power is given,
To make her home, almost an Eden.

VERGENNES, Mich.

PAULA ISADORE.

We are glad Kate has broken her long silence at last, and trust she will hereafter be found regularly in her place as a correspondent of the *Farmer*. She gives, in the following, good proof of being equal to the difficult and somewhat delicate task she has undertaken.

For the Michigan Farmer.

TO YOUNG LADIES AND MISSES—No. I.

ASH GROVE, March 5th, 1851.

Young, and unused to the world, many of you whom I address, have longed for the counsel of some one more experienced in the modern usages of society, to tell you how you may avoid mistakes which some fall into, exposing them to censure and neglect. Much has heretofore been written, prating of woman's duty and "sphere," but who has essayed to chat familiarly with Western Ladies? Those who have already entered upon the scene of action, will not scorn to be reminded of a few things which conduce to make up the sum of social happiness, while those who have not, will, I trust, accept the following suggestions. True, were I a Grace Greenwood, or a Fanny Forester, I should perhaps feel more at ease in my new vocation; but having scarcely approached the precincts of Fanny's "Authorland," I solicit a kind reception of the thoughts I, have collected on my way thither; feeling that I in some degree understand your position, and your rights—not *political* rights, but social, moral, and intellectual.

Not a few are immured in a school-room, but how many ever reflect on the consequences of habits formed there? As these habits are generally lasting, I propose to introduce at present, the subject of *dress*.

It has been remarked, that the human countenance is the index of the soul, but methinks it is no less true, that dress bespeaks the taste of the wearer. People are seldom so poor, or have so much to do, that they cannot dress neatly. If we see a woman slatternly attired, we no more think it was for want of time, than, if seeing another *over* dressed, we say, she had nothing else to do. Is there no discretion to be manifested in the selection of colors, as well as materials? I know some young ladies, who have a sorry habit of wearing too many colors at once, which is worse than the fastidiousness of others, who insist upon always wearing ribbands to match the color of the dress. But a dress may be very becoming, although accompanied by no contrast, it would make one look very sombre. Some colors, blend very well together; for instance, blue and drab, maroon and pink.

But whatever you wear, pray, preserve a uniformity, and not put on a blue dress, red neck ribbon, pink wristbands, and yellow belt. So far as it adds to the happiness of others, it is as much our duty to pay due attention to our apparel, as to cultivate our minds, and where there

is a well balanced mind, good sense will be the dictator. Tawdriness is unpardonable.

As regards fashion, our village girls are apt to pay too much attention to it, while some of our country ladies follow the opposite extreme. There should be such a similitude between the two, that the latter could not be distinguished from the former, either in point of dress, gracefulness, elegance, or manners. Fashion is good, so far as it is not perverted; and we should choose whatever is becoming to us. It would not be good taste for a short person to wear flounces, (or any thing else,) just because a tall lady whom she admired, did the same. Study your own stature and complexion, and wear only what becomes you.

A most injurious habit prevails among us, of wearing too light clothing. "I do not," says one, "I am sure I do not," says another, but hush—I know by the purple complexion, ungraceful movements, and uneasy respiration, that you do. Now, no matter how large a form Nature may have given you, you will be less graceful, less beautiful, and above all less healthy, so long as you torture yourselves with tight clothing. But more of this anon; I wish however to make this revolution in regard to dress, and ask you to think and act upon it—a month is not too long.

KATE ROCKVILLE.

For the Michigan Farmer.

THE WAY TO HAVE FLOWERS.

YPSILANTI, March 5th, 1851.

Mr. Isham:

In one of the July numbers for 1849, I recommended to lady gardeners, who kept plants in rooms, and who were solicitous to cultivate early annual flowers,—to select, late in the Autumn, small, healthy, seedlings, or slips even from favorite annuals, and keep them in the house during winter. I believe I promised, if they did so, and transferred them to the border as soon as frosts disappear, they would have early flowers.

I wish to enquire how many have followed my advice? as I would like to compare notes. Last Autumn, in the time of the "Indian Summer," I took up, self-sowed, seedling plants, of four varieties of the Petunia, and also the pale blue Ageratum Mexicana, and Helichrysum. I placed each plant in a small pot, and put them in the window. I have taken little trouble about them, only to water the earth around the roots; no water has been on the leaves during the winter. They are now in fine bloom, except the Helichrysum, which soon will be.

I shall turn them out in May, and thereafter, until the frosts of winter shall have frozen their leaves, they will continue to expand in new blooms, and yield myriads of flowers.

Were the seeds to be planted in May, they would not come into bloom until nearly the last of summer.

FLORA of 1849.

For the Michigan Farmer.

THE BEAUTIES OF NATURE.

DEXTER, March, 1851.

Mr. Isham:

Seeing my communication of last month in your Farmer, I take the liberty of addressing you again, and if the following should be considered worthy of insertion, I shall be highly pleased.

Many see nothing in Nature to please or attract; nothing worthy a moment's attention, or a moment's reflection. The noblest forest tree, or the lowliest shrub; the snow covered mountains, or the grassy plain; the sandy desert, or the roaring ocean, all have no charms, no beauty for them.—They see nothing in the blue sky, or the beautiful earth, to please, except it be made by human agency. Nothing that nature has formed will gratify. It must be Art; it must be something that is formed by human hands, something that is brought into existence by human skill, and then it is admirable, ay, almost worshiped. In many of our schools, the Arts are the principal studies; a knowledge of Nature is not considered particularly useful or desirable, and therefore thrown aside. But what pleasure does the botanist feel, as he rambles through the woods and fields, and discovers even the smallest and meanest of plants on which to exercise his knowledge; and the astronomer also, as he gazes to discover some obscure planet which has before escaped his notice.

Every flower, every star, and leaf, has something to teach. There is something in each to excite curiosity. The leaf, for instance, with its scores of fibres, running so closely, that the keenest observer can scarcely designate one from the other.

The leaf also might well represent human life, as well as rival human art. In the spring, it is first seen in the bud, and this is childhood; it then expands, until a beautiful green leaf appears; this is middle age; and in the Autumn it becomes brown and sere; this is old age, and at the slightest touch of winter, it falls; this is death. Many more illustrations might be added, to prove this fact, that every tree, every shrub, and plant, is the emblem of life, and immortality. Should we not then cultivate a taste for nature? I speak to the proud aristocratic city lady, (for I can scarcely conceive such an one in the country,) who would pass by the modest garden violet, for the artificial rose, and who would disdain to twine "Nature's truest ornaments" with her dark tresses, preferring rather the cold glitter of golden gems.

Respectfully yours,

VALERIA.

D. M. B.'s excellent article on the education of children, being crowded out of this department, will be found upon this last page.

MICHIGAN FARMER.

1851 Warren Isham Editor.

DETROIT, APRIL, 1851.

THAT IS NOT THE WAY.—A new agricultural monthly has been established at Columbus, Ohio, of which Prof. Mather, late State geologist, is editor. To this movement, friend Bateham, of the Ohio Cultivator, takes exceptions, and hence a quarrel has arisen between them, which is alike disgraceful to both. Why, Bateham, that is not the way. Since we made our *debut* in Michigan, two other agricultural papers have started up, both of which seemed to talk as though the State was behind the age, in not having an agricultural paper, and kindly offering to help her catch up with the rest of the world. Well, we "took it all in good part," introduced them very civilly to our readers, and then went straight to work, "*minding our own business*," and the result was, that the people of Michigan found out at last, that they had an agricultural paper already, and the persons engaged in these enterprises, being duly notified of the fact, very courteously withdrew, having no disposition to interfere with our vested rights, when they once found out how the matter stood. That's the way.

But we give you due notice, (Bateham and Mather, both,) that if you do not stop quarreling, we shall feel bound to come to Columbus and establish a paper that will crowd you both out.

NEW POSTAGE LAW.—According to the new postage law, the postage on letters not exceeding a half ounce, is three cents *pre-paid*, for any distance not exceeding three thousand miles, or five cents, if not *pre-paid*. Over that distance double those rates are to be charged. The law goes into operation on the first of July.


NEXT STATE FAIR.—The time for holding the next State Fair (in this city) has been changed; it is to come off on the 24th 25th, and 26th of Sept., instead of the 17th, 18th and 19th, as at first contemplated. This arrangement will give time for persons in attendance upon the New York and Ohio State Fairs to be present at our own, and multitudes of our farmers, who are a little *behind* with their seeding, and who would not in consequence be able to attend, will thus be accommodated.

Opinion of a New York Wheat Grower.—

A correspondent of Moore's Rural New Yorker, (W. R. S.) who dates from Ovid, Seneca Co., N. Y. says, in the last number of that paper: "I have been much interested in the perusal of the Prize Essay on Wheat Growing, prepared by the Editor of the Michigan Farmer, for the Michigan State Agricultural Society. It abounds in valuable information, well deserving the attentive consideration of every intelligent wheat grower."

[W. R. S. will see by our supplement, if it should chance to fall under his eye, that the single point which labors in his mind, is fully explained. —Ed.]

The Prairie Farmer says, "In an interesting essay on the culture of wheat, written by the editor of the Michigan Farmer, and for which he received the premium from the Agricultural Society of that State, we find the following facts in relation to deep plowing, which are worth remembering." &c.

 We are very well content to have our "Notes by the Way," lie over, to give our correspondents an opportunity to tell their own story. We volunteered to tell it for them, because it seemed to be the only way we could get any thing out of them. We greatly rejoice, that they are taking the matter into their own hands, and they know how to do the thing up right. When we get away, we will try and stumble upon something to tell of.

TO CORRESPONDENTS.—Recollect, that we have been trying, for a long time, to get a month beforehand with communications, and we have arrived at the consummation of our wishes for the time being, so that you must neither regard them as rejected, nor stop writing, because they do not immediately appear—write, write, and bear in mind, that you must send your communications a month before they can be inserted.

A SWINDLER.—The fellow advertised in our last, as having palmed himself off for an agent of the Farmer, was, it seems, a real personage.—We have received a letter from H. Cook Esq, of Homer, Cal. Co., enclosing a receipt for the Mich. Farmer for 1851, signed in due form, "H. Baldwin." This is all we know about him. We hope the scoundrel will be taken up and committed to prison, if still within our bounds. He is said to be an elderly man. Mr. C. sent on another dollar.

Of the multitudes who talked of going to the World's Fair, but very, very few, as we expected, have finally determined to go from this State. Judge Burt, of Macomb Co., Hon. John Burch, of Monroe, Luther Beecher Esq. of this city, and our humble self, constitute about all of Michigan, that will be present upon the great occasion. We cannot learn, that the price of a passage over, will be less than ordinary, as has been represented, nor did we expect it. Rather should we expect it to be higher, as the vessels will probably all be crowded.

To Competitors for Premiums.—Our friends who are competing for premiums, will have an opportunity of extending their efforts to the 15th of April, which is the limit we proposed. In the May number, will be published the names of those entitled to premiums, and we shall make arrangements, before leaving, for the payment of them all, upon the presentation of their claims at this office. The Wool Grower commences a new volume in April, and to all entitled to it we shall order it sent, as we pass thro' Buffalo. Should any wish the books to which they are entitled, sent by mail, it can be done.

We shall leave about the 10th of April, and we want all sent in previous to that time, that can be.

To those who have made inquiry as to the management of the Farmer in our absence, we would say, that it will be in good hands. The special charge of the Horticultural department, and the general supervision of the whole, will be committed to Mr. Charles Betts, who is well known to our readers by his communications which have appeared from time to time in the horticultural department over the signature of Rolynbeck, and in the agricultural department over his own signature.

Rev. Charles Fox, now a farmer, of Grosse Ile, whose extensive and accurate acquaintance with the great principles of agricultural science, has been attested by his communications in the sixth and seventh volumes of the Farmer, will be a contributor to the editorial department.

We have received from the Commissioner of patents, through Hon. A. W. Buel, a package of seeds for gratuitous distribution.

A WORD AT PARTING.

To the friends of the farmer we commit its interests, while we are far away in the prosecution of *their* interests rather than our own. Do you ask, how long we shall be gone, and what we shall accomplish? That will depend very much upon how much you accomplish, in our absence, for the Farmer. Should all effort be given up because we are gone, and remittances cease to come in, the wheels will cease to move, and we shall have to come straight home to look to the matter, having accomplished but little of what we intended. On the other hand, should new subscribers, with pay in advance, and old arrearages continue to come in, so as to keep pace with the vastly increased expenses of the establishment, we shall stay as long as we think the interests of the great cause demands it, extending our investigations into every department of human industry, for the special benefit of our readers.

Report of Committees on Agriculture.—We have received the report of the committee of the House of Representatives, (of which Hon. J. Shearer is chairman) upon the petitions sent in from various parts of the State for an increased appropriation in aid of the Michigan State Agricultural Society. The report sustains the prayer of the petitioners, by a train of arguments and appeals, which strongly commend themselves to the good sense, the patriotism, and right feeling of every man. The report is long, but we shall find room for portions of it hereafter. We regret to find our friend, Nathan Pearce, whom we had hoped to regard as a sort of right hand man, arrayed against the measure.

Uncle Nathan says, he has never got any premiums, that the gentlemen farmers get them all, &c. Fudge! Who is more of a gentleman farmer than yourself—the possessor of so much land, that you hardly know what to do with it, and as a consequence can accomplish but little!

We have also received the report of the minority of the Senate committee on the same subject which is adverse to granting the prayer of the petitioners, from which we conclude that the majority report of the same committee takes opposite ground, tho' we have not seen it. Our impression is, that our friend Hayden is alone in the minority. We are sorry to see that.

We are under obligations to Hon. Titus Dort, and Hon. Jonathan Shearer for Legislative documents.

LIST OF PREMIUMS. (Concluded from page 52.)

SWINE.

Judges—Jacob Summers, Utica, Macomb Co; Wm. Ten Eyck, Dearborn; Alvarado Brown, Quincy, Branch county.

| | | | |
|---|-------------|------------------------------------|------|
| Best boar, over 2 years old, | 3d do | do trans. | |
| 2d do do | \$5 00 | Best breeding sow over 1 year old, | 5 00 |
| 3d do do trans. | 2d do | do do | 3 00 |
| Best boar over 1 yr old, | 5 00 | 3d do do trans. | |
| 2d do do | 3 00 | Best breeding sow over 1 year old, | 5 00 |
| 3d do do trans. | 1 year old, | 5 00 | |
| Best boar over 6 m'nths and under 1 year, | 2d do | do do | 3 00 |
| 2d do do trans. | 3 00 | 3d do do trans. | |
| Best breeding sow over 2 years old, | 5 00 | 2d do do trans. | 3 00 |
| 2d do do | 3 00 | | |

POULTRY.

Judges—Melancthon Freeman, Kalamazoo; S. Gillet, Detroit; J. G. Cornell, Spring Arbor.

| | |
|---|------------|
| Best lot of Dorkings, not less than 3, 1 cock and 2 hens | 3 00 |
| do do Polands, | do do 3 00 |
| do do Large fowls, | do do 3 00 |
| do do Turkeys, | do do 3 00 |
| do do Ducks, | do do 3 00 |
| do do Guinea fowls, | do do 3 00 |
| do do Geese, Cook's Amer. Poultry book, and 100 do do Poultry, owned by exhibitor, statement to be furnished and verified, Bement's American Poulterer, and | 4 00 |
| Best exhibition of pigeons, | 2 00 |

FARM IMPLEMENTS—CLASS I.

Judges—On farm implements, classes 1 and 2, R. T. Merrill, Birmingham, Oakland co.; Edward Smith, Clinton; Hiram B. Mather, Niles.

| | | | |
|----------------------|------|-------------------------|------|
| Best farm wagon, | 5 00 | Best flax & hemp dress- | |
| " harrow, | 3 00 | er, | 5 00 |
| " corn cultivator, | 3 00 | " horse cart, for farm | 3 00 |
| " fanning mill, | 5 00 | " ox cart, | 3 00 |
| " corn stalk cutter, | 5 00 | " horse rake, | 2 00 |
| " straw cutter, | 3 00 | " ox yoke, | 2 00 |
| " corn & cob crush- | | " roller for gen'l use | 5 00 |
| er, horse power, | 5 00 | " clod-crusher and | |
| " clover machine, | 5 00 | roller combined, | 5 00 |

CLASS II.

| | | | |
|----------------------|------|-----------------------|------|
| Best plow harness, | 2 00 | Best six hand rakes, | 2 00 |
| " wagon " | 2 00 | " " hay forks, | 2 00 |
| " carriage " | 2 00 | " " manure forks, | 2 00 |
| " harness for gener- | | " " grain or cradle | |
| al purposes, | 2 00 | " scythes, | 2 00 |
| " riding saddle, | 1 00 | " six grass scythes, | 2 00 |
| " doz. axes, | 2 00 | " hay rigging, | 2 00 |
| " churn, | 2 00 | " lot grain measures, | 2 00 |
| " cheese press, | 2 00 | " 12 wired brooms, | 2 00 |
| " six milk pans, | 2 00 | 2d do do | 1 00 |
| " potato washer, | 2 00 | Best do twined do | 2 00 |
| " grain cradle, | 2 00 | 2d do do | 1 00 |

CLASS III.

Judges—Classes 3 and 4, P. R. Adams, Tecumseh; Isaac Lewis, Monroe; A. A. Wilder, Detroit; A. Parish, Coldwater; J. E. Beebe, Jackson.

| | |
|---|------------------|
| Best horse power for general purposes, on the sweep lever principle, | diploma and 5 00 |
| " horse power for general purposes, on the rail-road, or endless chain principle, | diploma and 5 00 |
| " iron horse power, | 5 00 |
| " threshing, to be used with steam or horse power, | 5 00 |
| " seed planter, for hand or horse power, for hills or drills, | diploma and 3 00 |
| " wheat drill, not less than six drills, | 3 00 |

| | |
|---|------------------|
| Best grain drill, with apparatus for depositing manure, | \$3 00 |
| " cultivator and drill combined, | 3 00 |
| " broad-cast sower, | diploma. |
| " wheat cultivator, | diploma and 2 00 |
| " portable saw-mill, for wood, fences, and for farm use, | diploma. |
| " corn-sheller, horse power, | diploma and 2 00 |
| " " " hand " " | diploma and 1 00 |
| " vegetable cutter, | diploma. |
| Best and most numerous collection of agricultural implements, manufactured in this state, by or under the supervision of the exhibitor; materials, workmanship, utility, durability, and prices to be considered. | |

CLASS IV—MACHINERY AND IMPLEMENTS.

For the best and most useful machine, or implement, for the farmer, either newly invented or an improvement on any now in use, medal and 10 00

PLOWS.

Judges—On plows and plowing, Linus Cone, Troy, Oakland Co., Jonathan Dayton, Grand Blanc, Genesee county; Wm. Dougherty, Berrien Springs, Berrien county.

| | |
|---|--------------------|
| Best sod plow for stiff soils, furrow not less than 7 inches in depth, nor over 10 inches in width, | [diploma and 5 00] |
| 2d best do do | 5 00 |
| Best do do for fallows or old land, dip. & 5 00 | |
| 2d do do do | 5 00 |
| Best subsoil plow, | diploma and 5 00 |

Plowing Match, with Horses.

| | |
|--|-------|
| First premium, | 10 00 |
| 2d " Gardner's Farmer's Dictionary and | 7 00 |
| 3d " " | 5 00 |

With Oxen, single teams.

| | |
|---|-------|
| First premium, | 10 00 |
| 2d " Gardner's Farmer's Dictionary, and | 7 00 |
| 3d " " | 5 00 |

Boys under 18 years of age, with Horses or Oxen.

| | | |
|---------------------------|-------------|------|
| First premium med. & 3 00 | 2d premium, | 3 00 |
| | 3d premium, | 2 00 |

BUTTER.

Judges—On butter, cheese, sugar, honey and bee hives, Austin Wales, Detroit; Isaac I. Voorhies, Pontiac; Mrs. H. E. De Garmo, Ann Arbor; Mrs. J. Shearer, Plymouth; Mrs. K. S. Bingham, Green Oak, Livingston county.

| | |
|--|------|
| Best lot of butter, (quality as well as quantity considered,) made from 5 cows in 30 consecutive days; 15 lbs. of the butter to be exhibited | 7 00 |
| 2d best do do | 5 00 |
| 3d " do Webster's Ency. Dom. Econ'y. | |
| 4th " do | 2 00 |
| Best 10 lbs. butter made in June, | 3 00 |
| 2d " " " Transact's and | 1 00 |
| 3d " " " " " | 2 00 |
| Best 15 lbs. butter made at any time, | 3 00 |
| 2d " " " " Transact's and | 1 00 |
| 3d " " " " " " | 2 00 |
| 4th " " " " " 8th vol. Mich. Far. | |

The exhibitors must state in writing the time when the butter was made; the number of cows kept on the farm; the mode of keeping, the treatment of the cream and milk before churning, summer and winter; the method of freeing the butter from milk; the quantity and kind of salt used; and whether saltpetre or other substance has been employed.

CHEESE.

| | |
|---|--------|
| Best cheese 1 y'r old or over, not less than 25 lbs. | 5 00 |
| 2d " " " " " " " " | " Web- |
| ster's Encyclopedia of Domestic Economy. | |
| 3 do do do do do do do | 2 00 |
| A statement of the manner of making the cheese, must accompany each sample. | |

SUGAR.

| | |
|----------------------------|------------------------|
| Best ten lbs. Maple Sugar, | 5 00 |
| 2d " do do | 3 00 |
| 3d " do do | 8th Vol. Mich. Farmer. |

HONEY AND BEE-HIVES.

| | | |
|---------------------|----------|--------------------|
| Best 10 lbs. Honey, | 3 00 | Michigan Farmer. |
| 2d " " " | 2 00 | Best Bee Hive with |
| 3d " " " | 8th Vol. | description, |

The Honey must be taken up without destroying the Bees; the kind of Hive to be specified.

DOMESTIC MANUFACTURES—CLASS I.

JUDGES—J. R. Kellogg, Allegan; H. N. Munson, St. Clair; Joseph Rhodes, Adrian.

| | |
|---|------------------------|
| Best pair Woolen Blankets, | Diploma and 4 00 |
| 2d " " " | Transactions and 2 00 |
| Best 10 yards Flannel, | Diploma and 4 00 |
| 2d " " " | 3 00 |
| Best 10 yards Woolen Cloth, | Diploma and 4 00 |
| 2d " " " | Transactions and 2 00 |
| Best 10 yards " Carpet, | Diploma and 5 00 |
| 2d " " " | 3 00 |
| 3d " " " | 2 00 |
| Best Hearth Rug, | 3 00 |
| 2d " " " | Transactions. |
| 3d " " " | 8th Vol. Mich. Farmer. |
| Best 10 yards of Rag Carpet, | Diploma and 3 00 |
| 2d " " " | 3 00 |
| 3d " " " | Transactions. |
| Best pair of Woolen Knit Stocking, | Trans. and 1 00 |
| 2d " " " | 1 00 |
| Best " " " Socks, | 2 00 |
| 2d " " " | 1 00 |
| Best " " " Mittens, | 1 00 |
| Best Woolen Coverlet, | Diploma and 1 00 |
| 2d " " " | Transactions. |
| Best piece of Broadcloth, | Diploma. |
| 2d " " " | Transactions. |
| Best " " " Satinet, | Diploma. |
| 2d " " " | Transactions. |
| Best Woolen Shawl, | 3 00 |
| 2d " " " | 2 00 |
| Best sample of Woollen Yarn not less than one lb. | 1 00 |
| " " " " Worsted | 1 00 |
| " pair of " Stockings, | 2 00 |

CLASS II.

Judges—J. Penny, Grand Rapids; S. C. Hammond, Detroit; John Palmer, Detroit.

| | | | |
|----------------------|--------|-----------------------|------|
| Best 10 yds Linen. | 5 00 | Best pr knit cotton | |
| 2d " " " | 3 00 | Stockings, | 2 00 |
| 3d " " " | Trans. | Best " wove " | 2 00 |
| Best " Tow Cloth, | 5 00 | " " knit linen Stock- | |
| 2d " " " | 3 00 | ings, | 2 00 |
| 3d " " " | Trans. | Best pound of linen | |
| Best " Linen Diaper, | 5 00 | thread, | 2 00 |
| 2d " " " | 3 00 | | |

Discretionary premiums will be awarded to articles of merit not included in the above list.

CLASS III.

Judges—H. P. Baldwin, Detroit; B. F. Eggleston, Jackson; F. Buhl, Detroit.

| | | | |
|--------------------------|-------------------------|-------------------------|--------|
| Best pr cowhide boots, | 3 00 | Best straw Hat, | 3 00 |
| 2d " " " | 2 00 | 2d " " " | 2 00 |
| 3d " " " | Trans. | 3d " " " | 1 00 |
| Best " calf boots, | 3 00 | Best " of lasts and not | |
| 2d " " " | 2 00 | less than four pair, | 2 00 |
| 3d " " " | Trans. | Best overcoat, Diplo- | |
| Best " men's cowhide | ma and | 4 00 | |
| shoes, | 2 00 | 2d " " " | 3 00 |
| 2d " " " | Trans. | Best dress coat, Diplo- | |
| Best " ladies slippers, | 2 00 | ma and | 3 00 |
| 2d " " " | Trans. | 2d " " " | 3 00 |
| Best " ladies calf boot- | Best pair pants, Diplo- | | |
| ees, | 2 00 | ma and | 2 00 |
| 2d " " " | Trans. | 2d " " " | Trans. |

| | |
|-----------------------------|------------------|
| Best vest, Diploma and 2 00 | Diploma and 2 00 |
| 2d " " Trans. | 2d " " Trans. |
| Best silk or fur hat, | |

CLASS IV.

Judges—Nathaniel Phillips, Ypsilanti; W. W. Calkins, Michigan Centre; Tuttle, Detroit.

| | |
|---|-----------------------|
| Best two horse carriage, | Diploma and 5 00 |
| 2d " " " | Transactions and 2 00 |
| Best one " " | Diploma and 5 00 |
| 2d " " " | 3 00 |
| Best Beadstead, | Diploma and 2 00 |
| " Sofa, | 3 00 |
| " Bureau, | Diploma and 2 00 |
| " six chairs, | 2 00 |
| " Table, | 2 00 |
| " Rocking chair, | 2 00 |
| " set of Horse shoes, | 1 00 |
| " Lot of horseshoe nails not less than one pound, | 1 00 |
| " " chisels, | Diploma and 3 00 |
| 2d " " " | 2 00 |
| Best lot of edgetools manufactured at one estab- | |
| lishment, | Diploma and 5 00 |
| Best lot of coopers tools, | Diploma |
| " Flour Barrel, | 1 00 |
| " Pork " | 1 00 |
| " wash tub | 1 00 |
| " water pail, | 1 00 |
| " panel door, | 2 00 |
| " lot of window sash, | 2 00 |
| " Cooking stove, | Diploma |
| " parlor " | |
| " pump, | 3 00 |

PAINTINGS, DRAWINGS, AND DAGUERREOTYPES.

Judges—F. E. Cohen, Detroit; Henry Ledyard, Detroit; Edward Lawrence, Ann Arbor.

| | |
|---|------|
| Best specimen of animal painting in oil by Mich- | |
| gan Artists, | 3 00 |
| Best " " " in water color by, | |
| Michigan Artists, Downing's Cottage Residences. | |
| Best " of cattle drawing, by Mich. Artists, | 2 00 |
| " " daguerreotype, | 2 00 |
| 2d " " " | 1 00 |
| Best oil or water color painting, by Mich. Artists, | 3 00 |
| " specimen of statuary, | |

NEEDLE, SHELL, AND WAX-WORK.

Judges—Rev. J. A. Baughman, Detroit; Miss Caroline K. Sawyer, Grand Blanc, Genesee Co.; Mrs. A. O. Hubbard, Detroit.

| | |
|---|-----------|
| Best Ornamental Needlework, | 3 00 |
| " Ottoman cover Downing's Cottage Residences. | |
| " Table " | 2 00 |
| " group of flowers, | 2 00 |
| " fancy chair-work with needle, | Downing's |
| Cottage Residences. | |
| " variety of worsted work, | 2 00 |
| " worked collar, | 2 00 |
| " worked quilt other than silk, | 3 00 |
| " white quilt, | 2 00 |
| " silk " | 3 00 |
| " portfolio, marked, | 2 00 |
| " silk bonnet, | 2 00 |
| " straw " | 2 00 |
| " lace cape, | 1 00 |
| " two lamp mats, | 1 00 |
| " ornamental shell work, | 2 00 |
| 2d " " " | 1 00 |
| Best specimen wax flowers, | 2 00 |
| 2d " " " | 1 00 |
| Best " artificial flowers, other than wax, | 2 00 |
| 2d " " " | 1 00 |

FLOWERS.

Judges—D. C. Walker, Romeo, Macomb Co.; Mrs. Mark Norris, Ypsilanti; Mrs. M. D. Brown Battle Creek.

| | |
|---|------|
| Best and greatest variety and quantity of cutflowers, | 3 00 |
| 2d " " " | 1 00 |

| | |
|--|--------|
| Best crop of Barley, not less than two acres, | 8 00 |
| 2d best " " " Leibig's Agricultural Chemistry and | 3 00 |
| Best crop of rye, not less than two acres, Colman's Tour. | |
| Best crop of oats, not less than 2 acres Colman's Tour. | |
| Best crop of potatoes, not less than one acre, | 4 00 |
| Best acre broom corn, | 3 00 |
| Best crop of carrots, not less than a quarter of an acre, | 4 00 |
| Best acre clover seed, | 4 00 |
| Best sample winter wheat, not less than 1 bushel, | 3 00 |
| Best sample spring wheat, " " " | |
| Johnston's Agricultural Chemistry. | |
| Best sample of flour from the least quantity of wheat, not less than one barrel, | 3 00 |
| Best sample of flour (without regard to quality of wheat used) not less than one barrel, | 5 00 |
| 2d best " " " 8th vol. Mich. Farmer. | 3 00 |
| 3d " " " " " " | |
| Best sample Indian corn, not less than one bushel | |
| Transactions. | |
| Best sample oats, not less than one bushel. | Trans. |

Awards on field crops will be made by the executive committee at its annual meeting in December.

Persons making applications for premiums on crops, must forward to the Secretary by the 1st of December, 1851, full statements of the variety, number of bushels and mode of cultivation of the articles for which they are competitors. The affidavit of the competitor should accompany his statements.

Essays.

Judges—Warner Wing, Monroe; Chas. A. Loomis, St. Clair; A. N. Hart, Lapeer, Lapeer Co.

| | |
|---|-------|
| Best essay on the cultivation of wheat, | 15 00 |
| Best essay on the cultivation of Indian Corn, | 15 00 |
| Best essay on the cultivation of potatoes, | 15 00 |
| Best essay on raising sheep. | 15 00 |
| Best essay on any other subject connected with agriculture. | 15 00 |

All essays for which premiums are awarded will be considered the property of the society.

For the Michigan Farmer.

MICHIGAN STATE AGRICULTURAL SOCIETY.

Since my last acknowledgements of articles received for the benefit of the Society, I have received from Gen. Lewis Cass a copy of the Patent Office Report and Statement of Commerce and Navigation to be placed in the Society's Library; also a package of Garden Seeds for gratuitous distribution.

I have also received from Gen. Cass a package of Grass Seed, presented to him by Lieut. Gunnison. The following letter from Lieut. Gunnison will explain its value.

J. C. HOLMES,

Secy. Mich. State Agricult. Society.

Detroit, 19th Feb. 1851.

Washington, Feb. 7, 1851.

Lieut. Gunnison begs to present his compliments to Gen. Cass and offer a package of the Bunch Grass seed which we found to be so nutritious and fattening to our animals in the Rocky Mountains. I take pleasure in presenting it knowing your efforts and interest in agricultural improvements and prosperity. If it should be found to grow well in our State it will doubtless

be a desideratum, for the beef fed on this grass is superior to any I have seen and the dairy articles also.

It grows on hill sides and in the valleys, preferring pebbly sandy soils, but flourishes on the banks of creeks, and in one instance I noticed a heavy growth on marshy ground. This is from the meadow land in Utah valley. The seed resembles the oat, but the culm makes fine hay and has apparently a great quantity of saccharine matter. On account of the dry summers it ripens in May and June in the mountains, and the hay left on the stalks remains good to the following year, and cattle are enabled to winter there in the valleys wherever the snow is not too deep, and keep fat all the time, and in the spring do not seem to be in any hurry to leave the dried for the green crop.

I have the honor to be,

Respectfully, your obdt. servt.

Hon. Lewis Cass, }

J. W. GUNNISON.

U. S. Senator. }

THE OAT CROP—ITS CLAIMS EXAMINED.

For the Michigan Farmer.

Mr. Editor :

As the time for sowing oats approaches, a few words in relation to them as a crop, and the importance of using clean seed, may not be out of place at this time.

There is probably no other crop in this country cultivated to an equal extent, which yields so uncertain a profit, at least on our common open land, on account of unfavorable seasons, and probably no other that impoverishes the soil and its cultivator to the same extent. In addition to this, farms on which this crop has been extensively grown, are covered with pigeon, June grass, and sorrel, together with abundance of noxious weeds often rendering it nearly worthless for cultivation.

Judging from my own experience for the past five years, I should say, that five bushels of corn can be raised, one year with another, on the same ground that will produce three of oats, with little if any more cost of labor, and leave the land in much better order for the succeeding crop. The best crop of oats I have had in the last five years, grew on a piece of ground that yielded 28 bushels of wheat the previous year, to the acre, then oats 35 bushels, followed by a little over 50 bushels of corn, for the third crop, the worst of it being that I got a "considerable sprinkling" of sorrel with the oats, that, but for extra attention in hoeing the corn, would have spread over the whole field, and rendered it nearly valueless in a short time.

I admit there is inconvenience in getting along without oats for horse feed, but think it would be better to substitute ground corn and shorts, or perhaps rye for hot weather; corn alone answers a good purpose in winter.

Although chopped feed requires a little more time in its preparation, it is without doubt cheaper,

and better for a team than any kind of whole grain. But if oats must be raised, it is of great importance, that particular care be taken to sow none but clean seed so as to keep out the pigeon grass, and the *sour* pest sorrel, which is the greatest nuisance we have at present to contend with in this region. As the oat crop is used only for stock feed, but little attention is paid to the preparation of the seed, and, as a consequence, those farms that have been extensively devoted to their production, have become, in many instances, almost unfit for cultivation. With some persons (I do not say farmers) it is a common practice to put oats on that portion of the farm, if any, that is too foul for wheat, and would need extra labor, if put in corn, and fields, as Mr. Dougherty says, resembling blood is the result. A neighbor, who is a large farmer, says he has no sorrel in his land, except where he has had oats.

In conclusion, I will say, brother farmers, if you must raise oats, sow plaster and clover seed with them, and always use clean seed.

Earnestly wishing you a happy visit to the great Fair, on the continent, and a safe return

I am truly yours,

For the Michigan Farmer.

ON BEES...No. 5.

THE HONEY BEE.

Doubling swarms, peculiar habits, &c.

It is frequently the case, that swarms are very small, particularly the third swarm, from the same hive.

Small swarms are not profitable for several reasons: first, they of course have less strength of numbers to protect themselves against robbery from other and stronger swarms. Secondly, there will be less animal heat to keep them from perishing during the winter, and in consequence of being cold in the winter, they require more food in proportion to the size of the swarms, than a large one (and many of the most experienced apiarians assert that a small swarm will consume as much food as a large one) from the fact that there is not sufficient animal heat in a small swarm. This subject of keeping animals warm, has been ably handled in an editorial article in the December No. of the Michigan Farmer, and what is there said, is perfectly applicable to the honey bee, so far as it has reference to the difference in the quantity of food required.

When swarms are small, they should be doubled, if practicable. This may be done when there is not more than eight or ten days difference in their age. Within twenty four hours after the youngest swarm has been hived, place the two hives together, one above the other, first, place a sheet of wire gauze upon the top of the youngest swarm, after placing it upon the exact spot in the bee-house where the oldest one has stood, stop up

a portion of the mouth of the oldest one, so as to prevent the ingress and egress of the bees. It will be best to stop it with a piece of wire-gauze; see that the ventilators are opened, that they do not smother; let them remain in this situation one night, then remove the wire gauze, that has been inserted between the two hives, but not open the mouth of the upper hive. In doubling swarms in this manner, when the style of hive we have proposed, is used, the bottom board will have to be removed from the hive of the oldest swarm, and of course there will be no mouth or passage way to stop. This process causes the breath of the two swarms to mingle, the effect of which is to allay their natural hostility.

It may be supposed that, as we have provided the swarm with a hive, and protected them from the weather by placing them in a bee-house; all has been done that is necessary to insure success. This is not however the case; very far from it. Much attention is still required, and a knowledge of their wants and habits, all of which however, afford a corresponding pleasure, aside from the final remuneration in young swarms, honey, and their general prosperity.

I know of no one insect, the study of whose habits affords the same amount of pleasure to those who have a taste for the study of the works of nature. Their peculiar adaptation to the sphere which they occupy, their organization and capacities, are most singular and interesting. Some few of their peculiar traits of character, I have already spoken of; but there are others which it is necessary to speak of in order to their successful management.

One of their peculiarities, is the capacity or power of transforming the eggs of the common neuter or working bee; that is, those eggs which in ordinary circumstances would produce none other than neuters, into queens, or female bees. The process by which this is done, is not well understood; but that the bees possess this power, there is not the least doubt in the mind of those best acquainted with their habits, as many very simple experiments have demonstrated. It is supposed that in the process of transmutation, the larva is fed with different food from that given to the ordinary larva, from which neuters are produced. The larva or egg from which it is proposed to produce a queen, is placed by the working bees in a different position from those of the ordinary brood, to wit: in a perpendicular position, the others being horizontal. The comb, or cell, varies very materially from that of the other bees. It is formed of a large mass of wax, of an oval shape, much in appearance like that of a bumble-bee, and perhaps fifteen or twenty times the strength and thickness of an ordinary cell, and is always attached to the edge of the combs, and frequently six or eight of them may be seen in a hive, and from some cause or other, which it is difficult to explain, except it be that the bees cannot manage the combs well, when old, dry, thick

and hard, they frequently fail in their attempts at transmutation, when the combs are in that condition. Thus, another reason for removing the old combs from the hives, as often as every third year, quite an advantage this derived from a knowledge of their habits; it frequently occurs in the examination of the hives during the fall or winter, (that is, those from which young swarms have issued during the previous summer,) that there are but few or no bees, but an abundance of honey. This is accounted for in the facts, that a young swarm had colonized therefrom, and, as has been before stated, the old queen came forth with the young swarm, leaving some litters of eggs behind, and that the combs were so bad, that the bees were unable to supply their loss, which often occurs, and no other reason can be assigned.

Again, they are an insect that possess the capacity, or can be resuscitated, after being frozen. It is not natural for them to remain dormant during the winter, they should be frequently examined and if found frozen, remove them to a very warm room, where the thermometer would range from 80° to 100°. Close the mouth of the hive after the ventilation, and thaw them out, and they will not have sustained any material injury; it may require eight or ten hours to thaw them out.

For the Michigan Farmer.

MANURES--TURNING UNDER CLOVER.

Mr. Isham:

There is probably no subject relating to agriculture, about which there has been more said and written, than about manure, and yet how few of us perfectly understand the best and most economical method for collecting and saving it.—It is to manure that the farmer must look for increasing his crops, and thereby increasing his profits. It would occupy too much space to go into the details of obtaining and applying the three classes of manures, viz. Vegetable, Animal and Mineral. I will therefore confine myself to a few remarks on the first, as being the one most easily and cheaply obtained. The plowing in of green crops and the decay of straw from threshed grain form almost all the vegetable manure that is commonly used. The crops most usually employed for plowing under are clover, rye, Indian corn, (sown thick) and sanfoin.—Of these clover is most commonly used in this country, and is invaluable in restoring the worn out wheat lands of this State. It is best, sown with oats or barley, and harrowed in with a light harrow. If the season should be very dry after the clover has sprouted, I would recommend sowing plaster over it, this from its peculiar power of absorbing moisture, will often save it, though it seems to have withered. In the fall, unless the clover grows rank and strong, it would be better not to pasture it, as the roots are short and tender, and easily pulled up by cattle. The next year, it

may be cut for hay, and the year after pastured until June, and then left to grow, to be turned under as manure, not less than two weeks before seeding. We thus form a rich bed for our wheat, the clover by its system of broad leaves absorbing most of its nourishment from the atmosphere, while its long tap-root brings up from the subsoil, the inorganic elements. It must be remembered however, that in bringing up or enriching land by green crops, we do not in reality add any of the inorganic elements of plants, they only bring them up from the subsoil. The inorganic part of the soil, therefore is actually diminishing, by means of the crops taken off, and we should be careful to supply this loss, by occasionally adding some form of mineral manure. According to Prof. Johnson, clover at the end of two years, leaves vegetable matter in the form of roots, equal to nearly one half the whole weight of hay the clover has yielded. Therefore supposing the weight of hay to have been four tons, we have two tons of vegetable matter in the form of roots, added to the soil when it is plowed up.

Let us now turn to the other form of vegetable manure usually employed, viz. straw. This is usually stacked, and cattle allowed to eat it and pull it out, to be tramped under their feet in large masses, until spring, when it is hauled out and put on to the corn ground, but partially rotted. This method is probably accompanied with as little labor as possible, but it may well be asked, whether more labor would not be well applied with increased benefits to the crops.

In the first place, the barnyard should slope gently towards a centre, in order that all the liquid manure may be collected, and here I would pile the straw, as fast as it is trampled and mixed with the dung of the animals. I prefer piling my horse and cow manure all together, as that from horses if piled separately, unless great care is taken, is liable to over heating, and becoming fire fanged. The tops of the piles should be covered 3 or 4 inches thick with earth, to prevent the escape of the gases which rise as soon as the heap begins to ferment. In this way, when the manure is drawn out in the spring, for the corn or other crops, it is sufficiently rotted to be of immediate benefit to the young plants, enabling them to send out vigorous roots in search of the food which they draw in from the earth. To increase our manure heaps, all rubbish should be collected and thrown into them, all the weeds that disfigure fence-corners should be mown down and carted to the barn-yard; even rags and prunings from trees, in short, every thing that can be, let it be saved and go as far as it will towards making wheat or other crops. In conclusion, I would call on every farmer to look well about him, and ask himself, the question, is there no means by which I might increase my quantity of manure?

Your truly,

T. D.

Horticultural.

For the Michigan Farmer.

MELON CULTURE.

Editor Mich. Farmer :

Sir—You have at different times requested me to give you the results of my experiments in the raising of melons, and as the time is now near by, when the seed for early melons should be sown ; it appears a good opportunity to do it. That this fruit is not more extensively cultivated by our farmers, appears to be owing both to a want of acquaintance with the excellence and wholesomeness of the finer varieties, and an idea that the cultivation is a matter of difficulty. Now, while I confess, that the common yellow musk-melon is one of the most insipid and indigestible of our summer fruits, I assert that the finer varieties of the green-fleshed melons, when in perfection, hardly yield in lusciousness and flavor to the richest of tropical fruits, and are perfectly wholesome and digestible, as an experience of years in the abundant use of them in my family has proved. As recently cleared ground is excellent for their production, the farmer on new land may, with very little trouble, have an abundant supply of this wholesome and delicious fruit, years before he can eat a single apple, peach or plum of his own raising. The best variety in all respects, flavor, abundance of product and hardness, is the small round, thickly netted, green fleshed melon, often called, but I think improperly, nutmeg melon. The best, and most perfect of these have deep furrows, and are considerably flattened at the poles; the flesh of this variety has a rich green hue, is very sweet and juicy, melting in the mouth, and almost without fibre. And now for the cultivation.

To begin, (even for early melons), I repudiate the hot-bed entirely, for sundry reasons : first, the fruit ripened in the hot bed is never as fine as that ripened in the open air ; second, if you wish to force plants for subsequent transplantation, those forced in a hot-bed always lose ground by transplantation, and are an easier prey to the frost and cut-worm ; third, the trouble and expense of a hot bed are avoided by the method I am about to detail, and earlier and more vigorous plants are produced. I procure, (about the middle of March for very early melons) as many of the small common red earth flower pots as I intend to have hills of melons ; the size is about five inches high and the same across the top. Over the hole in the bottom of the pot, I put a chip about two inches wide, and as long as will extend from one side to the other of the bottom of the pot, this should be put in loosely, so as not to prevent the water from passing out at the hole. The pots are now to be filled with rich moist earth, and eight or ten seeds sown in each ; they are then to be ranged on a board in the window of the kitchen, or other warm room, where they will have a fair

allowance of sun, and the earth is to be kept moderately moist. When the plants begin to put out the first leaves after the seed leaves, pull out all but five of the strongest plants to each pot, being careful to disturb the roots of these five as little as possible.

Early in May the plants will have put out from five to seven leaves each, and will be strong and fit to transplant. It is a good plan, as the time for transplantation approaches, to place the pots in the open air during the day, and even during the night when no frost is apprehended. I may here observe that eight hills, under proper cultivation, yield more melons than a moderate sized family can dispose of. I have ripened two hundred melons from eight hills, in a hard clay soil. The best soil is a dry sandy loam, and it can hardly be too highly manured ; the best of all manures is pigeon dung, next to this the dung of fowls, and then the manure of the pigstye, or well rotted stable manure. The hills should be about eight or ten feet apart, and made in the form of a low truncated cone, raised about eighteen inches above the surrounding surface, about three feet across the top, and four feet at the base ; there should be a shallow furrow or trench at the base of each hill. A hole of the proper size to receive the contents of one pot, should be made in the top of each hill. The finger, or a stick inserted into the hole in the bottom of the pot, will easily raise the chip and with it the whole of the earth and plants ; the earth will be found penetrated in every direction by the roots, which will hold it together in a solid mass ; this is now to be placed in the hole in the top of the hill, and the earth firmly pressed around it. In this way the plants lose no ground by transplantation. If they are transplanted early in May, they will probably require sheltering occasionally at night, from the frost ; this can easily be done by means of a newspaper folded into the shape of a hollow cone, and kept from being blown away by stones or pieces of earth placed on the edges. Next to frost, the cut worm is the worst enemy of young melon plants, and the only way effectually to guard against it, is to examine the earth of the top of the hill frequently and kill them. This can be done by children. The size and quantity of fruit can be much increased by watering the vines twice a week, with liquid manure, made from the dung of fowls or pigeons. I put a half bushel of dung into a barrel wanting one head—fill it up with water and use this with a common watering pot. I have now said as much as will suffice to put anybody in the way of having abundance of early melons, if he can only get good seed. The expense of the eight pots is less than half a dollar, and they will do for a series of years, if carefully put away in a dry place, when not in use. I may, in some future number, give you some further remarks on the cultivation of melons, as a source of profit near large towns.* I will now conclude by saying that I have some *old* seed of the finest varieties, to which any one is wel-

come who will take the trouble to come for it.†

Detroit, March 11, 1851,

*Please let them come.—Ed.

†Old seed is the best—it can be had by calling at our office.—Ed.

For the Michigan Farmer.

A LADY HORTICULTURIST ASKING THE WAY.

Mr. Isham :

I introduce myself to you as the wife of a lawyer, and as such, seek advice through the columns of your paper, to which my husband has been a regular subscriber. My husband's business engrosses so much of his time that I have resolved to take upon myself the charge of our garden. He thinks that he can earn more in his office than he can in his garden, while I think a great deal of a good garden. I am quite ignorant of the business I am about to undertake, and although my husband and friends will give me advice, I thought that some hints from some of your contributors, would not come amiss. The soil here is sandy—our garden lies to the south, and very sandy—through the southern extremity of the lot—however, there is a strip of swampy ground, from whence arises a spring which supplies us with water.

I wish to know what is most needed to prepare the ground properly, and any hints about the best method of raising, and the best kind of cucumbers, melons, tomatoes, beans, peas, cabbages, squashes, and all other garden vegetables, would be very acceptable. I would like to know the best time for setting out grapes, and the method of culture required to ensure success in raising—also gooseberries—the best way of pruning and trimming peach trees, and currant bushes.

If you, or your subscribers, think my enquiries are worth answering, the hints I may receive through your columns, may be of great service to me in my undertaking, and perhaps to some others.

In the January No. of the Farmer, I noticed that Dr. Drake was disposed to find fault with the existing mode of cooking. I think it is not half fair to find fault with any one, without giving directions how those faults may be remedied—and there are many doubtless, who would correct their faults in those respects, if they had something more definite than such sweeping general directions to guide them.*

February 12, 1851.

SUSAN.

*Having our hands full, we hope some of our very obliging correspondents will have the gallantry to direct the horticultural footsteps of the fair inquirer in the right way. Our May No. will be in season for most vegetables.—Ed.

For the Michigan Farmer.

CULTURE OF THE GRAPE VINE.

Dear Sir :

Having received the first number of the Michigan Farmer, I conceive it my duty to make some return to my fellow citizens for their various and useful communications. I profess to know something of the cultivation of the grape vine. I have two very fine vines, which were growing on my farm, when I bought it seven years ago. I paid no attention to them for the first three years, but on the fourth I began to cultivate them, and the first summer they yielded me about half a bushel of delicious grapes. Last season I gathered four bushels.

My method of training them is this : having set good heart rails 12 feet long, 2 feet in the ground, 3 feet apart, (as far as the vine will reach, or 3 or 4 feet further at each end), I then nail on small straight poles, or 2 inches wide lath-stuff, one foot apart, cross ways.

The vine should be pruned in the month of February or March, before the sap begins to stir; the knife must not be used after this, till the ensuing winter or spring.

To get plenty of young healthy wood, the longest and best shoot on the vine should be inlaid, one to the north, and one to the south, laying the shoot or limb of the vine about 4 inches below the surface of the ground, bringing it above ground at every post. By this means you will have the young shoot just where it should be, against the post. Tie the shoot up to the post, till it reaches the top, then break it off; during the summer, take off all the other young wood, once in two weeks : pluck it off.

The first year after inlaying, there will be no grapes, the second, a plenty. Having got a good shoot against every post, the next spring look out for your grapes, they will soon show themselves on the young wood and side shoots. One of these should be tied to every one of the cross poles, leaving it one foot, or a little more, in length, all the young shoots must be carefully broken off at that length, and the next spring, these side shoots that produced the grapes, must be cut off, to make way for the new wood, which only leaves the fruit in every spring. The vine may be increased 6 or 8 feet, by saving two good shoots of young wood on the last post, and then inlaying one of them. Old vines may retain a good deal of their wood for the first year—after that it should be all removed, to raise new vines, inlay some strong wood from the root, as before recommended.

If you can insert this in the Michigan Farmer for March, you will oblige,

Yours truly,
MATTHEW ATMORE.

Pennfield, Cal. Co. Feb. 21, 1851.

For the Michigan Farmer.

SUCCESSFUL EXPERIMENT WITH FOREIGN GRAPES.

Mr. Isham:

It may be interesting to some of your readers to hear another experiment of mine, tried last summer. I have a grape vine, of the white sweet water variety, fourteen years old, during which time it has ripened but three crops of fruit. In April last, I procured a quantity of iron ore, say three pecks pulverized, and mixed it with the soil, to the depth of three inches, over a circle of four feet in diameter, of which the root of the vine formed the centre. When the fruit had grown to the size of a duck-shot, I sprinkled it with dry sulphur—when wet with dew or rain, and repeated the sprinkling three or four times during the summer. The result was a good crop of grapes in the fall, and I have faith enough in the operation to try it again the coming season.*

Yours, &c.

WM. TEN BROOK.

P. S. If there is any virtue in the ore used on the vine, perhaps iron filings, or the filings from a blacksmith's anvil would answer the same purpose.

*Please let the readers of the Farmer hear from you often.—Ed.

For the Michigan Farmer.

POMOLOGICAL INQUIRY.

Mr. Isham:

Will you, or some one of your correspondents give us some account of the character and origin of what are called lice on apple-trees? Large trees in my orchard 20 years old, are covered with lice from the root to the last year's growth. I hardly know what they really are, or how to get rid of them, whether they are animate or inanimate? if animate, whether they belong to the tribe of insects, or that of vermin? I have not been troubled with them till last year, and as there are none on the last year's growth, they must have commenced operation late in the fall, or early in the spring.

I am pleased with the Farmer and will only add, success to the enterprise.

Yours truly,

WILLIAM TAYLOR.

Schoolcraft, March 5, 1851.

ARTESIAN WELL.—The famous Artesian well, at Kissingen, in Batavia, commenced eighteen years ago, and which it was feared would have to be abandoned as a failure, has just given the most satisfactory results. The town is located in a saline valley, nine hundred and eighty-four feet above the level of the Baltic sea. Last June the boring had reached a depth of eighteen hundred and thirty-seven feet, and several layers of salt, separated by a strata of granite, had been traversed, when carbonic acid gas, followed again

by granite, was found. Finally, on the 12th inst. at a depth of two thousand and sixty-seven feet, perseverance was rewarded by complete success. A violent explosion burst away the scaffolding built to facilitate the operations, and a column of water, four and a half inches in diameter, spouted forth to the height of 98 feet above the surface. The water, clear as crystal, is of a temperature of sixty-six Fahrenheit, and is abundantly charged with salt. It is calculated that the annual product will be upwards of 6,600,000 lbs. per annum, increasing the royal revenue by 300,000 florins, after deducting all expenses.—*Paris letter to the National Intelligencer.*

ADVANTAGES OF A HOME PAPER—DRAINING.

For the Michigan Farmer.

GRAND BLANC, Genesee Co.,

February 7th, 1851.

Mr. Isham:

Dear Sir: Your paper appears to be gaining in the estimation of people in these parts. Some who now take foreign agricultural papers have expressed their preference for the Michigan Farmer, as being much better adapted to our wants. I am decidedly of the opinion that farmers get more benefit from a good home agricultural journal than from any abroad, because a judicious editor will have reference to the climate, soil, face of the country, habits of the people, &c., where he is located.

Furthermore, we naturally feel more interest in what is going on around us, and may derive both profit and pleasure in reading the opinions and experiments of brother farmers. A physician gains much of his knowledge from the experience of others, and why may not farmers do the same?

Your valuable paper has come promptly, save the No. for March, 1850, which may eventually issue from some candle box, and induce others to become subscribers.

Inquiry about draining.—I have a marsh about water level; by a short, deep ditch, a fall of 15 feet may be obtained. Now suppose this ditch merely to reach the water course of the marsh, which is near the edge, would this drain it sufficiently?—or must the ditch extend the length of the marsh?*

Again, suppose a marsh perfectly drained, as the vegetable mould is apparently without bottom, would it not lack sufficient moisture without irrigation?†

Wishing success to your enterprise, I am

Yours truly,

EDWARD PARSONS.

* Some marshes are fed by springs, issuing at the foot of the adjacent uplands, and in such case the ditch, to be effectual, must encircle them, or as nearly so as the springs do. Sometimes marshes are occasioned by reason of the subsoil being

impervious to water. But whatever the cause, they can seldom be drained sufficiently without extending ditches through them—not only a main ditch, taking the course the water generally runs, but smaller tributary ones, extended through the lowest places.—Ed.

† No danger of that. Wet lands, especially clay, are the very first to suffer from drouth, and no land can be cultivated to advantage until divested of its stagnant water, which effectually prevents the descent into it of rain water, with the fertilizing elements it has brought down from the atmosphere, and the ascent, by capillary attraction, of water from below, holding in solution the mineral elements which are essential to the growth of vegetation. We take it for granted that the peaty surface consisting of partially decayed vegetable matter, has either been removed by burning, or otherwise, or reduced to a state of decomposition.—Ed.

For the Michigan Farmer.

PLOWS.

Editor of the Farmer:

You, and probably most of your readers, are sensible of the tribulations that the farmers of Michigan have endured, in the use of the single article of Plows.

Feeling in common with a few of the friends of improvement here, a desire for something better, I imported, in the early part of winter, a half dozen of the justly celebrated Eagle Plows, from the manufacturers. Ruggles, Nourse, Mason and Co., Mass.

They are truly an excellent implement. I think they cannot be easily beaten on either side of the Atlantic, the opinion of Prof. Johnson to the contrary notwithstanding. The material is all of the very best quality, and the workmanship nearly perfect.

The peculiar turn of the mouldboard renders them very easily drawn, while all parts receive an equal amount of wear. The point, share, and landside are all chilled; and these with the mouldboard are all ground and polished. These plows received the first prize at the great trial of Plows at Essex, Mass., a few years ago. The judging committee in their report, say: "As near as we can ascertain, this Plow combines all the great qualities manifested in either of the others, with some peculiar to itself; and our attention was called to the *quality* of the castings on the Plows of Ruggles, & Co., their *finish* and *durability*. Their appearance is certainly more perfect than anything we have elsewhere seen. The process of chilling the point, the entire edge of the share and base of the landside, gives a permanence and durability to the work, that renders it of a decidedly superior character, and we think

there is no hazard in saying that the value of the parts thus made, is more than doubled by the process."

These Plows have taken over 400 premiums. I shall continue to import from the manufacturers a few of these noble implements yearly, for the benefit of the farmers in South-Western Michigan. Any person wishing a Plow can make application personally or by letter, stating the kind of work to be performed, the amount of team, how he wishes a plow rigged, &c., and I will furnish it here, or send it to any point desired on a public route, *at cost, providing* I have no trouble with the collecting of the pay.

The manufacturers have, of late been getting up two new sizes, specially designed for *deep cultivation*. One is a sword Plow; the other is for crossing and turning under stubble, long manure, any and every kind of refuse material that may be upon the ground; and cannot be clogged, being 18 inches from the sole to the under side of the beam. I have three on hand now, (one not sold) which any person can see by calling.

CHAS. BETTS.

Burr Oak, St. Joseph Co.

"IT'S THE WAY DADDY DID, AND I GUESS HE KNOWD."

For the Michigan Farmer.

SALINE, Feb. 20, 1851.

Friend Isham:

I am a plain man, and a farmer by profession, having been brought up or rather grew up one, or in other words a self made farmer, as what little knowledge of the art I possess, I have obtained by experience and observation. I had no one to assist and advise me when I commenced tilling the soil, as my father died when I was quite young, consequently I was thrown upon my own resources to obtain the knowledge so necessary in the pursuit of agriculture.

I have observed, that most of the farmers, as far as my acquaintance extends, are the sons of farmers, and are willing to follow the mode of farming practised by their fathers, so that the old adage will apply to such, "so father, so son, and the way father did was about right." They are in the habit of tilling the soil, or rather tilling at it, and laying out a certain amount of labor, and putting a certain quantity of seed upon the acre, and if any of them have tried any experiment, in sowing an additional quantity of seed to the acre, they have either paid no attention to it, or have guessed that it was no better than the rest part of the field, and have tried it but once, and come to the conclusion, that it was all a humbug, and relapse into the same practice as before. Some of them break up their fallows 6 or 7 inches deep [4 or 5 inches.—Ed.] and think this is a sufficient depth, which some, if the plow should meet with some obstruction, and be thrown out the ground, pass on, and thus cut and cover until they have finished their plowing, and then put

in their seed in the same slovenly manner, and if they find spots in their fields where there is not much grain, they wonder why it is not more even, and no more bushels to the acre. Now, in this there is no marvel, for who does not know, that seed sown on a cart path, can never produce any thing. When will our farmers awake to their best interests, and cultivate their land in such a manner, that instead of raising 10 or 15 bushels per acre, they may raise double that amount? I verily believe, that if the farmers of Michigan, would cultivate their land in the best manner, and instead of running over a large territory, as some do, and lay out the same amount of labor upon $\frac{1}{2}$ or $\frac{1}{4}$ as much as they now cultivate, they would soon cease to cry light crops and hard times. Farmers of Michigan, will you awake?

If you think the above worth an insertion in your valuable paper, I will give some of my own experience in agriculture in future communications.*

YANKEE AT THE WEST.

* Let it come.—Ed.

For the Michigan Farmer.

REPLY TO 'PLOW JOGGER.

Mr. Editor,

A writer in the last Farmer, over the signature of "Plow Jogger," wishes the opinion of your correspondents on a certain point; to wit: Why do weeds spring up on the first ploughing of a new piece invariably, although it may be 10 or 100 miles from any previous settlement? Now, Sir, I venture my opinion, if others have a better one, I hope they will present it.

The mounds, fortifications, ruins of cities, &c., &c., prove beyond a doubt that this country has been peopled by a race of men more industrious than the aborigines that were found here. Doubtless, this race of men cultivated the earth, to some extent at least. There is a spot in the State of New-York where the rows of corn may be distinctly traced, in a now heavy timbered tract. My supposition is, that, the seed of these weeds has lain in the ground from the time of its former cultivation. Does any one startle at the idea of seed lying so long in the ground? If it will lie ten, or twenty years, why not a thousand, or ten thousand. The frog, or bat that can exist in a state of hibernation for six or eight years, and still preserve its vitality, could, on the same principle perpetuate life a thousand years—hence frogs are sometimes found imbedded in solid rock, still retaining their vitality, which geology assures us, is many thousand years old. Now it seems to me much less wonderful, that seeds should preserve their vegetative power, than, an animal should retain its living principle after a lapse of thousands of years. It is the experience of every one who has taken the trouble to examine, that the seed of various vegetables will remain in the ground ten, or twenty years. A case which is just at this moment in my mind's

eye, let me mention: My father once allowed a neighbor to sow some hemp on a patch of ground; the ground was afterward stocked down and lay some twenty years, not a stalk of hemp ever made its appearance—but on ploughing it, solitary stalks of hemp came up over the whole piece.

R. RANDALL, JR.

For the Michigan Farmer.

TO YOUNG FARMERS.—No. II.

RAINY DAYS.

How shall our young farmers employ their rainy days?

It depends somewhat upon the proportion of these to fine ones. A rainy day once in two or three weeks, may be spent in resting the body, and preparing for fair weather. A young man, or older one, can do no more work in 313 days, than he is able to do in 280. A rainy day spent in relaxation during harvest time, is no loss. You can do enough more the week following to make it up. I go on the supposition of your *really working*, when you pretend to work. You need some rest occasionally. You must either take it on rainy days, or fair days, or else be sick and take it just when your overworked system has complained till tired of it, and lies down in the furrow and *will rest*, let the mind say what it pleases.

Do up the work in doors on rainy days.—If your father does not own many tools, show him how he can make it profitable to furnish them. With even a handsaw, a hatchet, a shaving knife and adze, and half inch, one and a half inch auger, a large and small gimlet, you can mend a plow handle, repair the rakes, make a hencoop or a pig trough. Some have more mechanical genius than others, but a thousand things can be done, by any one who chooses to learn.

Learn to drive the hoop to a pail, or tub, or barrel, instead of permitting them to fall to pieces, and then in order to get these proofs of your carelessness out of sight, converting them into kindling wood for the stove. You will be repaid ten fold by the praises of your mother, and the smiles of your sisters. You expect to get a wife by and by, and if you learn how to please your mother and sisters, depend on it, you will have a good wife, or none. In the spring clean out the cellar, the very first rainy day. Next, put the barn, corn-crib, wood-house, &c., in order. What is the use of letting everything look like a picture of distress about the house, when you spend ten times as many hours in loafing, as it would require to make every thing snug. This, remember, is not so much your father's work as yours. It would do you good too, to see how well pleased he is with your care. When young men complain of cross, exacting fathers, I always suspect that they themselves are *shirks*. Remember, the young man who is not industrious and careful, before he is twenty-one, will never become

so afterwards. He may think he will do great things when he gets settled in life, and has a wife he loves, and additional motives to industry; but old habits will hang about him. He who is loaferish at twenty, will be a regular loafer at thirty,—“no mistake.”—*The habits you form in youth will stick to you through life.*

Attend to personal preparations on rainy days. Take out your Sunday coat and pants, and brush them thoroughly. Black your calf skin boots, get all in prime order, so, that a visit, a meeting, or a wedding, shall not catch you napping. Some people are regular “minute men,” they prepare before hand. Others are always an hour behind hand. A sudden call, finds every thing out of place; one horse has lost his shoe, one or two bolts to the buggy are broken, a boot needs a sole or a patch. All is hurry, and scurry, and fret, because things are all out of sorts. *Slack people*, when out of humor, are sure to blame every body but themselves.

But I stop. If I can spare time I will call again.

Yours truly,

S. Y.

For the Michigan Farmer.

A WORD TO CORRESPONDENTS.

Mr. Isham: In the course of my agricultural reading, I have often been annoyed by those everlasting apologies which are but too often made by correspondents. One apologises for his “miserable scrawl,” another for the “want of time,” another for his “style,” and still another for something else. To my mind, that is all only fold-erol, and had always better be omitted.

We plain farmers want the pith of the matter the writer wishes to communicate; we want it in as few words as possible—in language we can all understand; and we want the whole *modus operandi*. If the subject be the cultivation of a crop of corn, tell us how it was put in and cultivated—what was the nature of the soil—how manured—what crops preceded it, and the result. If you write on wheat culture, give us all the particulars of your doings in regard to it—don’t leave anything in regard to your mode of culture, &c. untold—nothing to be guessed at.—We are not all Yankees, and therefore may not be good at “guessing,” and if we were, might not guess right.

All who write for the papers, should bear in mind that the editor likes short, well written articles, on interesting and important subjects, and that the printer’s “devil” likes plain copy.

If you keep these hints before your “mind’s eye,” you will be very likely to appear in print, and that is just what you expect when you write for the papers.

It may not be amiss to bear in mind, that some folks have quite a goodly pile of communications always on hand, besides “notes by the way,” containing “bits too good to be lost,” which, if

you are too prosy, will surely slip in before you. What I have said, is said, and no apology to any one.

A SUBSCRIBER.

Calhoun county, March, 1851.

For the Michigan Farmer,

POTATOE CULTURE—CLOVER AND PLASTER MAKE WHEAT.

ALBION, Cal. Co., Feb. 22d, 1851.

Mr. Isham:

The frequent appeals you make to correspondents to contribute to the columns of your valuable paper, impel me to send this communication.

As the season for planting potatoes will soon arrive, let me suggest a mode of obtaining them early, which I learned from an Irish gardener I had many years ago.

About three or four weeks before planting time, select your largest and smallest potatoes, cut them in pieces, leaving three or four eyes to each piece, put them in a box, sprinkle earth moderately moist over them, and keep them in the cellar till they sprout. Then plant early.—When the tops show themselves, cover them up with the hoe, making the hill the full size to remain permanently during the summer. This will protect them from any late frosts which might cut the tops down—they will soon reappear and grow luxuriantly, if your soil is good, and well manured. By this means you will have potatoes early, and they will be nearly all of a size—they will require no more hoeing than to keep down the weeds.

I am surprised that plaster is not more generally used in the sandy soil of this country. Some thirty years ago, I resided in Long Point country, Upper Canada, where I could walk from one field to another, over sand drifts, covering the fences—the fields bare of any thing but a few stunted, parched up mullen stalks. Now, it is the richest wheat growing section in Canada, farmers getting from thirty to forty bushels of wheat per acre. This result was attained by the use of clover and plaster. Before their use, it used to be a standing joke that no farmer there had a title to his lands, as they were so liable to be blown away.

It is only lately that the true fertilizing property of plaster is understood. Our old instructor, Professor Eaton, said it arose from its strong affinity for moisture, but this is not all, for we now know that plaster is a strong absorbent of the gases necessary as nutrition for plants, especially Ammonia and Carbonic acid. These gases it absorbs during the night, and gives them off by day. In their ascent to the surface they are arrested by the fibrous roots or feeders of the plants which greedily absorb them.

Yours sincerely,

Geo. K. Smith.

We have received, thro' the P. M. at Dexter, a very fine sample of wool from the flock of Mr. Rogers, near that place.

Flax Cotton.—Dr. O. S. Leavitt, of Maysville, Kentucky, has invented machinery, by which, it is asserted, he produces from unrotted hemp, or flax, (by crushing and bruising) specimens of lint, equalling, in fineness of fibre, the softest silk, and making an article of cloth superior to the best Irish linen, and having the softness, warmth, and whiteness of cotton, and as cheap.

CORN CULTURE.

For the Michigan Farmer,

Mr. Isham:

In cultivating corn, it is proposed by some to go through with the harrow, then the cultivator, and next plow, which last operation is to leave a great quantity of ground on the roots of the corn. All this may be proper, but it is devoting considerable time to one crop. I have had no great experience in farming of any kind; but I think it would be preferable to adopt one of two modes I shall here give; first, as soon as the corn is large enough to show the rows, go through it with a number three plow, running close to the hills, and throwing the dirt from them; then, after a few days, go through the other way, (across) and throw the dirt up to the hills, and after some time, go through with the cultivator both ways, sufficiently to level the ground and cover the weeds, &c.

Or, second method—use the double shovel plow, an implement which is coming into use in this neighborhood; is very convenient as you can with it, till the ground very close to the hill, with out disturbing it, and at the same time leave the same quantity, or a little more, about the hill.

A. D. SULLIVAN.

SOUTHFIELD, Feb. 10th, 1851.

For the Michigan Farmer.

EDUCATION OF CHILDREN—No. II.

Children, should, as far as possible, be governed through the affections. Some may always be governed in this way; and after considerable experience, I have come to the conclusion, that if children are rightly managed, from their birth, for then education commences, coercion would seldom be necessary. But the mother must have her own spirit under proper control, before she can expect to control her children rightly. I admit, this is no easy task, still it is possible, and any true hearted woman, will endeavor to conquer self, for the good of her children. We must be careful not to be unreasonable in our requirements, and then exact, strict obedience to them; for children will have no respect for a parent, who permits them to disobey with impunity. Let every mother, and every other person, who has the care of children, be assured, that nothing will sooner impair the love and respect of children,

and indeed of all dependants, than fretfulness. Reprove, strongly, if necessary; punish, if they deserve it, but do not fret. Let them always feel, that unless they have willfully committed some real fault, they are sure of kind looks and kind words. Children will, and should be, children, and they should be encouraged in all innocent amusement and frolic. Suppose they should sometimes nearly deafen you with their shouts and laughter, if they are happy, and good natured, it is far better than to smother the natural buoyancy of childhood. They should, of course, be taught when, it is necessary, and proper to be quiet. Let them always feel, that they are sure of your sympathy in all their little troubles, as great for them to bear, as greater ones for those of maturer years; but carefully avoid teaching them to nurse their troubles. If your little one falls, "kiss the place to make it well," and turn the accident off as lightly as possible; do not as I have seen mothers do, beat the floor because it hurt the baby, for this is teaching a spirit of revenge; I would sooner say, "poor floor, or table, did Charley hurt you? Charley is sorry;" this diverts the child's mind from its own hurt, excites pity and sympathy for something it feels it may have injured, and this is one of its first lessons, in sympathy for others. How often have I seen a child cut its finger, and the mother throw the naughty, bad, wicked knife, spitefully away; do not mothers see the spirit this is nourishing? I am not one of those, who would keep everything away from a child, with which it could hurt itself; it can just as easily be taught at 18 months old, to eat with a small fork, as to wait until it is 4 years; or as soon learn to have its plate in its proper place at that age, as older. Give the little boy a knife, (blunt pointed of course,) teach him how to hold a stick to whittle, so that he will not cut his fingers. In fact, the sooner children, who are past infancy, are taught to amuse themselves, the less trouble they are, and the more happy and useful they will be, when they grow older. Compare the city children, in a nursery until 4 or 5 years old, with a well cared for country child: the one must be dressed and led to school, the other can dress itself, feed the chickens, pick up chips, and do many other little things, and better than all, take care of itself. Children, who are early taught to depend on themselves, after having all care that is necessary, bestowed upon them, will sooner become useful members of society. D. M. B.

Fruit Trees!

The subscribers offer for sale the largest and finest Lot of Fruit Trees, Ornamental Trees and Shrubbery, Herbaceous Perennial Flowering Plants, &c., &c., to be found in this vicinity, among which are

10,000 Peach Trees

of the choicest varieties, for sale at greatly reduced prices. Particular attention paid to orders from a distance; trees packed in the best manner, and forwarded to order. Catalogues furnished gratis to all post paid applicants. We invite those wishing to purchase to give us a trial, and we pledge ourselves to give satisfaction. HUBBARD & DAVIS.
Detroit, March 18, 1851. april

RECEIPTS for the Michigan Farmer,

from Feb. 22 to March 20, 1851:

J Burt 24; J V De Puy 1; C Clark 1; G W Lee 1; G B Bennett 2; B Peckham 3; P M Ellsworth 1; G Bennett 1; G Murray 1; J J Milham 10; D Conover 635; G W Lee 2; W C King 560; E M Sickner 1; G S Moore 1; G Tripp 1; H G Root 1; Sutton 1; H B Crosby 1; W Hurd 1; A A Copeland 2; L Kaffia 2; E P Benham 1155; I Coe 1; J P Beach 4; A A Copeland 3; B Perkins 2; J H Wheeler 1; H Brown 35cts; D W C Smith 1; R M Beal 1; J H Dubois 7; G W Kennedy 4; A D Crane 1; H Cook 3; F F Parker & Bro 15; G F Lewis 5; A J Goodrich 80c; L F Mott 1; M Clansson 2; J C Williams 1; J J Devey 1; W Beal 1; J E Kelsey 1; A Winchell 2; D C McVean 2; D Pittman 1; C Clark 1; Hallock & Raymond, 15; J Allen 75c; G Patten 2; H Cook 1; D Williams 240; J V De Puy 3; J Winters 3; Dr H Beardsley 2; D Bates 1; S Cummings 1; D Kiene 1; S L Blackmer 1; A D Sullivan 237; Gen J Orr 1125; W Taylor 1; J Parsons 4; A J Goodrich 1; W A Warner 3; Dr O Morrison 1; R Glasier 1; R Root 1; L Walker 1; R Randall 1; B F Root 1; W Snow 1; H Brown 2; A Brewer 1; S H Tuttle 1; J Mac 1; G Lester 350; C H Frost 2; W Beal 2; Dr A E Leete 2; A E Massey 1; J Gage 1; W Black 1; J R Bowers 1; S Smith 1; C Spear 2; C Osterhout 2; O Nichol 1; P Kneiss 1; D Aldrich 1; W Hemingway 1; M Allen 8; H P Hoag 1; M S Smith 1; G M Reynolds 1; J S Curtis 1; J Osborn 1; S Allen 3; G Luther 1025; R Robinson 1; Hawley & Co 3; G Robb 3; O Hampton 4; A B Bartlett 3; G S Wright 100; W H Pattison 1; H M Beach 3; C Corey 1; S H Davis 1; Johnson 1; W C Gage 75c; D B Payne, 75c; J Dawson 1; A Stewart 2; J Burton 2; J G Abbott 1; R T Payne 1; L F Olmstead 1; N Chittenden 1; A A Copeland 1; J De Garmo 1; J J Robinson 8; M Hodsman 1; 4; S Rappelle 1; E Ingersol 3; C Clark 1; S D Williams 1; 380; H Brown 1; H Blakely 1; E S Walker 1; C A Boice 2; G H Kedzie 5; W N Comstock 2; C G George 150; L Maynard 5; Ezra Root 1; A H Latimer 1; G T Hitchcock 450; J Gage 1; J Montgomery 4; R P Mason 1; C Betts 240; A Duncan 1; J Trowbridge 1; Dr T P Matthews 2; J Griffith 1; H Bradley 2; S P Gregg 1; F Danforth 4; N P E-hart 1; J W Pardee 3; J G Beach 1; S Rodgers 1; D O & W S Penfield 20; J E Kelsey 1; E Lord 1.

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The stock of pear, cherries, and peaches is particularly fine. Many of the cherry and dwarf pear trees are now showing fruit buds. Apple, quince, also currants, raspberries, gooseberries, strawberries, and grapes, of all the choice varieties, can be supplied at as low prices as at any other nursery.

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Detroit, April, 1851.

ap3m

J. C. HOLMES.

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| Lime, bbl | 70 | Eggs, doz | 8 |
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| Rye, | 40 | Onions, bu | 70 |
| Barley, | 93 | Cranberries, | 1 00 |
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| Beans, | 100 | Peaches, do | 2 50 |
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| Pork, | 8a12 00 | Pine Lumber, clear \$20 thou. | 15 " |
| White Fish, | 6a5 50 | Second clear | 11 " |
| Trout, | 3 50a6 50 | Bill Lumber | 12 " |
| Cod Fish, lb, | 5a5j | Flooring, | 10 " |
| Cheese, | 6 | Common, | 2 " |
| Wood, cord, | 1 75a2 25 | Lath, | 2 " |

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He also propagates extensively, for sale, the newest and best varieties of Grape Vines, Gooseberries, Raspberries, Currants, Strawberries and Rhubarb. Together with a large assortment of

Ornamental Trees and Flowering Shrubs,

Comprising a rich variety of roses and tree peonies. Also, an extensive assortment of bulbous flower roots, including a choice collection of named Tulips and Hyacinths, besides Lilies, Narcissus, Jonquils, Irises, Dahlias, &c. &c., together with a general assortment of HERBACEOUS PLANTS.

The whole will be disposed of at very moderate prices, for CASH. Orders by mail, addressed to James Dougall, Detroit, or left at the store of Mr. Wm. Clay, Detroit, or at the new nursery at Windsor, will be promptly attended to.

Orders should be sent in March, or as early in April as possible.

March 1st, 1851.

ap3m

JAMES DOUGALL.

ONE PRICE ONLY!

1851.] Spring and Summer. [1851.

CLOTHING AT WHOLESALE & RETAIL.

At the well known establishment of the subscribers, corner of Jefferson and Woodward avenues, may be found a very large assortment of clothing comprising every quality and description of garments, which for style, durability and economy, cannot be excelled. FARMERS and MECHANICS may here procure substantial and economical garments; and as no deviation in price is practiced, they can rely upon purchasing goods, in all cases, at the lowest possible rates. Under this system the inexperienced can buy as low as the most expert and practiced buyer. Also on hand

Boys' and Children's Clothing

in great variety, India rubber and oiled clothing, Trunks and Carpet Bags, under garments, cravats, stocks, &c. &c.

Cloths, cassimeres and vestings, always on hand, and made up to order in the best manner. HALLOCK & RAYMOND.

March 9, 1851.

ap3m

Paper Warehouse.

THE undersigned has opened an extensive Paper Warehouse, on Jefferson Avenue, Detroit, for the exclusive sale of all kinds of paper, where a general assortment can be found at all times. The attention of country dealers is respectfully invited, before purchasing elsewhere. Cash paid for rags.

Detroit, Feb. 19, 1851.

mar1v

Back Volumes of the Farmer.

A few copies of the 6th, 7th, and 8th volumes of the Mich. Farmer, pamphlet bound and in bundle, or sale at our book store.

Detroit, Feb. 1st, 1851.

mar1v

C. MOITRE & SON.

EAGLE & ELLIOTT,

DEALERS IN

CLOTHING.

Wholesale and for the Million!

KEEP constantly on hand as large a stock of Ready Made Clothing as may be found west of New York. Being of Philadelphia manufacture, and well suited for the market, they are prepared to sell at low prices, at wholesale or in quantities to suit purchasers. They beg leave to call attention to their

New Cloth Ware Room, second story.

French, Belgian, English, and American Cloths; cassimeres and trimming, serges, satins and vestings, making the best assorted stock of these goods to be found west of Buffalo; for sale wholesale or made to order, at their

Custom Department,

where every satisfaction as to fit, style, &c., is warranted; and at reasonable prices. **EAGLE & ELLIOTT,**

31 Woodward Avenue, nearly opposite Presbyterian church, Detroit. Jan

Attention Soldiers and old Volunteers !!!

EACH of the commissioned and non-commissioned officers, Musicians or Privates, whether Regulars, Volunteers, or Militia, at the view of minor children of those deceased, who actually served nine months in the war of 1812, or in any Indian wars since 1790, and each of the commissioned officers of the Mexican war, are entitled to 160 acres of land. Those who served four months are entitled to 80 acres. Those who served one month are entitled to 40 acres.

I will procure warrants for such as are entitled, by calling on me or writing to me. Business from a distance promptly attended to. Banking office next door to the Post Office, Woodward Avenue, Detroit, Michigan.

Letters must be post paid.

Jan G. F. LEWIS, Exchange Broker.
N. B. Claims for Pensions, Extra Pay, &c., attended to.

DETROIT SEED STORE**And Agricultural Warehouse!**

GARDEN, FIELD, AND FLOWER SEEDS,

IMPORTED Flower Roots, Agricultural Implements and Machines, Starbuck's Troy Plow, Rogers Nourse & Mason's Eagle Plow, and Wisconsin Plow, Grant's fanning mills, Riche's straw-cutters, corn-planter and sub-drill, washing machines, corn shellers, cultivators, thermometer churns, &c. &c.

...ALSO...

Agents for the sale of Wheeler's Patent Improved Portable Rail Road Horse Power and Over-hot Threshers and Separators. **F. PARKER & BROTHER,**

myl 31 Woodward Avenue.

T. H. ARMSTRONG,

Manufacturer of and Dealer in

SUPERIOR HATS AND CAPS,**No. 58, Woodward Avenue,**

(Between the Presbyterian Church, and Jefferson Avenue,
Sign of Big Hat, Detroit.

ALSO, Dealer in Furs, Robes, Muffs, Umbrellas, Canes, Gloves, Scarfs, Cravats, Suspender Buckskin Gloves, &c., very cheap for cash.

Would respectfully solicit the patronage of Farmers and others coming into the city, pledging himself to sell as cheap as any other establishment east of New York.

His stock of Hats and Caps are of his own manufacture and warranted the best.

Orders for any style of Hat or Cap promptly attended to.

CHARLES PIQUETTE,

MANUFACTURER OF
SUPERIOR DIAMOND POINTED
GOLD PENS.

DAMAGED PENS RE-POINTED.

Also, damaged Watches and Jewelry, repaired by a superior workman, and the work warranted.
Detroit, August 1, 1850.

Willson's Premium Corn and Cob Mill,

IS still being manufactured by the subscriber, at his Temperance House in Jackson. They are acknowledged to be the best Corn and Cob Mills now in the land for their powerful ability, durability, portability, and great strength.—Price \$20. The balance wheel constitutes a powerful sheller.

Also, Willson's Portable Provender Mill,

For grinding all kinds of shelled grain and screenings for feed—price \$35. Either of these Machines are not surpassed by anything in their line in the land. Feb '51 J. T. WILLSON.

AGRICULTURAL IMPLEMENTS.

A Large and increasing variety constantly on hand, at MANUFACTURERS prices, adding transportation, among which are the following:

| | |
|--|----------------|
| Starbuck's Premium Plows, 8 sizes, | \$4 to \$18 00 |
| Ruggles, Nourse, Mason & Co., do, | 3 to 14 00 |
| Emery & Co., do, | 3 to 14 00 |
| Emery & Co's Improved Railroad Horse Powers and Over-Shot Threshing Machines and Separators, one horse \$145, two horse \$170. | |

Wheeler's do. \$140 to \$165.
Smith's New Improved Ventilating Smut Machine and Buck-wheat Scourer, \$40 to \$200.

Straw Cutters, from \$6 to \$17. Corn Shellers, from \$8 to \$20. Emery's Corn Planter and Seed Drill, \$15. Vegetable cutters, \$18; Fold ng Harrows, 8 to \$20; corn and wheat cultivators, 5 to \$9; fanning mills; cast iron dirt scrapers, 4 to \$7; grid stones with rollers, 2 to \$10; churns, 1 50 to \$6; agricultural furnaces, 10 to \$30; cheese presses; hydraulic rams, 10 to \$30; wheel-barrow, 4 to \$6; well and cistern pumps, 3 to \$10; wheat drills; bush-hooks and scythes, 1 50; Bog hoes, \$2; pruning knives, \$2; pruning saw and chisels, \$2; post spoons, \$1; screw wrench, 1 50 to \$5; Trucks, &c. &c., 3 to \$10.

Also, hay, straw, and dung forks, potato hooks, hoes, shovels, spades, grain cradles, scythes, rakes, hay knives, chisels, plow points, &c. &c.—all for sale cheap for cash.

D. O. & W. S. PENFIELD,
Jan 37 Woodward Avenue.

J. G. DARBY,**ENGRAVER.**

No. 151, Corner Jefferson Avenue and Bates Street,
Detroit, (Third Story.)

MAPS, Visiting and Business Cards, Portraits,
Bills of Exchange, Wood Cuts, &c.

—ALSO—

Door Plates, Silver Ware, &c., elegantly engraved.
Detroit, January 1st, 1850.

SMITH'S Patent Ventilating Smut Machine—

Also, Mott's Agricultural Furnace, for sale by

D. O. & W. S. PENFIELD.

Detroit, Jan'y 1, 1850.

MICHIGAN BOOKSTORE.

THE SUBSCRIBERS having rented the new and commodious store adjoining the Young Men's Hall, on Jefferson Avenue, are now opening one of the largest stocks of

BOOKS & STATIONERY,

To be found west of New York. Their assortment includes LAW, MEDICAL, THEOLOGICAL, MISCELLANEOUS, classical, and school Books. All of which are offered to the public, wholesale or retail, at prices much lower than heretofore. They also carry on the Book Binding business, and are prepared to manufacture to order, County and Town Record Books, Merchants' Ledgers, Journals, Day Books and other kinds of Blank Work generally, of the best materials and workmanship. Pamphlets, Magazines, &c. bound with neatness and dispatch. A share of public patronage is respectfully solicited.

Detroit, Jan'y 1, 1851. Jan C. MORSE & SON.

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